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ABSTRACT

THE BIBLIOGRAPHY CONTAINS 89 ABSTRACTS DEALING WITH COUNSELING, ACHIEVEMENT, CREATIVITY, CHARACTERISTICS, EDUCATION, AND OTHER TOPICS RELATING TO THE GIFTED. INCLUDED ARE AN AUTHOR AND SUBJECT INDEX AND INFORMATION ON COST EITHER FOR INDIVIDUAL DOCUMENTS OR FOR THE ENTIRE BIBLIOGRAPHY. (JM)

ED036037

# EXCEPTIONAL CHILDREN BIBLIOGRAPHY SERIES

## THE GIFTED

November 1969

CEC INFORMATION CENTER ON EXCEPTIONAL CHILDREN

The Council for Exceptional Children
1499 Jefferson Davis Highway, Suite 900
Arlington, Virginia 22202

EC004968

An Educational Resources Information Center and member of the Special Education IMC/RMC Network

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# THE GIFTED

November 1969

CEC Information Center on Exceptional Children
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1499 Jefferson Davis Highway
Arlington, Virginia 22202

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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## ABSTRACT 1

EC 000 004 ED 010 715
Publ. Date Mar 66 30p.
Bodahl, Eleanor
**Guidelines for the Referral of Children Who Are Suspected or Known To Be Exceptional.**
State Dept. Of Educ., Boise, Idaho. Except. Child. Comm.
EDRS mf,hc

Descriptors: exceptional child education; mentally handicapped; physically handicapped; physical characteristics; psychological characteristics; aurally handicapped; emotionally disturbed; gifted; behavior patterns; guides; multiply handicapped; trainable mentally handicapped; socially maladjusted; educable mentally handicapped; deaf; blind; health impaired; referral; incidence; Idaho

Information is provided in this booklet about crippled and health impaired, speech impaired, hearing impaired, deaf, blind, partially sighted, emotionally disturbed and socially maladjusted, educable mentally handicapped, trainable mentally handicapped, multiply handicapped, and gifted. For each exceptionality, a definition, incidence figures, and characteristics are given. Seven references are cited. (MY)

## ABSTRACT 2

EC 000 039 ED 013 504
Publ. Date 29 Jul 65 18p.
**Guidance Data for Program Assignment in the Warren City Schools.**
Warren City Schools, Ohio, Office Of The Supt.
EDRS mf,hc

Descriptors: exceptional child education; identification; gifted; slow learners; student placement; student evaluation; enrichment programs; accelerated programs; vocational education; admission criteria; public schools; flexible progression; program guides; tests; test results; teacher responsibility; records (forms); guidelines; teachers; average students; Warren

Criteria for placement in various educational programs are described in this guide for regular classroom teachers in Warren City, Ohio. Three levels of programs are offered for primary and upper elementary grades and five levels for junior and senior high school grades. Determinations are based on mental ability, test scores, performance on standard achievement tests, marks, and teacher's estimate of the pupil. Detailed criteria for placement in each program are outlined. Sample guidance forms with directions and parent notification forms are presented. (JW)

## ABSTRACT 3

EC 000 044 ED 010 921
Publ. Date Aug 63 49p.
Karnes, Merle B. And Others
**The Effects of Typing Instruction on Creativity and Achievement among the Gifted.**
Champaign Community Unit School Dist., Ill.
EDRS mf.hc

Descriptors: exceptional child research; gifted; achievement tests; academic achievement; elementary school students; typewriting; creativity research; work study skills; creative writing; creative thinking; reading; spelling; intermediate grades; curriculum enrichment; Iowa Everypupil Tests; Guilford Unusual Uses and Consequences Tests; 1960 Stanford Binet Scale; California Achievement Tests; Champaign

Two groups of 31 or more fourth grade children, who tested at 115 or higher on the 1960 Stanford-Binet Intelligence Scale, received enrichment in creative thinking and writing. One group received typing instruction. Pretests administered in the fourth grade and again to the same students in the sixth grade included the California Achievement Tests (reading and spelling), work-study skills tests of the Iowa Everypupil Tests of Basic Skills, Guilford Unusual Uses and Consequences Tests, and a creative writing test. Results showed that the use of typing by academically talented intermediate grade children was not harmful to achievement in such areas as work-study skills, reading, and spelling. The experimental group using typewriters showed significantly greater gains in creative writing and creative thinking than did the control group. (JA)

## ABSTRACT 4

EC 000 157 ED 012 124
Publ. Date 66 87p.
**Guidance Handbook for Special Education Programs, a Plan For Initiating, Building, Implementing, and Conducting Programs for Exceptional Children with Guidelines for Following Legal Requirements and Developing District Philosophy and Objectives.**
Fresno County Schools, California
EDRS mf,hc

Descriptors: exceptional child education; program planning; legislation; administration; state legislation; Fresno County special classes; program evaluation; program planning; consultant services; administrative organization; curriculum; compensatory education; culturally disadvantaged; academically handicapped; special services; mentally handicapped; gifted; aurally handicapped; speech handicapped; visually handicapped; physically handicapped; aphasia; cerebral palsy; California Administrative Code Title Five; California Education Code

For each exceptionality area, this document outlines a statement of legislative intent, services available through the office of the County Superintendent of Schools, initiating of a district program, building a district program, implementing and conducting a district program, and evaluating a district program. The appendix charts salient points in the state legislative codes and lists sources of information and services. (GB)

## ABSTRACT 5

EC 001 160 ED 018 031
Publ. Date Aug 65 121p.
Hennes, James D. And Others
**The Illinois Television Project for the Gifted, a Combined Experimental and Demonstration Project to Test and Demonstrate Televised Enrichment Units for Students at Upper Elementary Levels. Final Report.**
Illinois Univ., Urbana, Off. Instr. Resources
Central Illinois Instr. Television Assn., Urbana
EDRS mf,hc

Descriptors: exceptional child research; gifted; audiovisual instruction; enrichment; enrichment programs; academic enrichment; enrichment activities; astronomy; mathematics; geography; televised instruction; television; instructional television; video tape recordings; grade 5; grade 6; comparative testing; attitudes; changing attitudes; academic achievement; creativity; independent study; student reaction; demonstration projects

The results of an experimental project using three series of enrichment units are summarized in this report. Each project consisted of 12 half-hour videotape presentations in astronomy, mathematics, and geography. The lessons were presented to 570 gifted (average IQ of 124) fifth and sixth grade students who represented the upper 25 percent of the total fifth and sixth grade population. Control groups were established by having the children view two of the three series. Work in the project was voluntary, and no grades were given. The program operated completely apart from classroom context and did not involve teachers in any way. Viewers and nonviewers were compared in test performance reaction, attitude toward subject matter, and other factors. Results indicated that significant (.001 level of confidence) improvement in learned context occurred for all three courses. Pupils reported liking the lessons, but little or no difference in attitude or overt behavior was found between viewers and nonviewers. Few students reported any difficulty in keeping up with regular classroom work. The Creativity Aptitude of the student had little bearing on success in (achievement) or attitude toward the telecasts. Independent study ability was related to success in the course. Recommendations are made on selection of students who will view and methods of using the telecasts. Sample tests, questionnaires, and information on related studies are included. A bibliography lists 29 items. (RM)

## ABSTRACT 6

EC 001 249 ED 018 896
Publ. Date 67
Love, Harold D.
**Exceptional Children in a Modern Society.**
EDRS not available

Descriptors: exceptional child education; identification; educational needs;

mentally handicapped; visually handicapped; partially sighted; blind; gifted; deaf; hard of hearing; speech handicapped; orthopedically handicapped; special health problems; socially maladjusted; emotionally disturbed; children; parent attitudes; identification tests; speech therapy; special classes; etiology

Intended for undergraduates and beginning graduate students, the text introduces the kinds of exceptionality, incidence figures, and identification procedures. The following topics are also considered--(1) the mentally retarded, (2) the gifted, (3) the blind and partially sighted, (4) speech problems, (5) the deaf and hard of hearing, (6) orthopedic and health impaired children, (7) socially and emotionally maladjusted children, (8) minimal brain dysfunction, and (9) parental attitudes toward exceptional children. Each chapter of the book concludes with a selected bibliography. This document was published by the Wm. C. Brown Book Company, 135 South Locust Street, Dubuque, Iowa 52001, and is available for $5.50. (DF)

## ABSTRACT 7

EC 001 478 ED 018 899
Publ. Date Jan 67 42p.
Cornish, Robert L.
**Studies of Gifted Children Completed by Students at the University of Kansas. Kansas Studies in Education, Volume 17, Number 1.**
Kansas Univ., Lawrence, Sch. Of Educ.
EDRS mf,hc

Descriptors: exceptional child research; gifted; identification; achievement; educational needs; research reviews (publications); research projects; academic ability; creativity; talented students; underachievers; educational programs; educational problems; music; ability; teacher attitudes; student attitudes; curriculum; self concept; language arts; higher education; grouping (instructional purposes); achievement; thought processes; prediction

Abstracts of 27 studies were compiled as examples of investigations made by teachers concerned with the individual qualities of gifted children in their schools. The studies are arranged in four sections--identification and characteristics, achievement in school, higher education, and educational provisions and programs. Each section provides a short introduction with discussion of definitions, problems, other research findings, and practices. Topics treated include the need for proper identification of academic talent, creative talent, kinesthetic talent, psychosocial talent, practical problems of underachievement, neglect in the literature of approaches to the gifted at the college level, and the need for definite educational programs for the gifted. Also considered are self concept, teacher and test identification criteria, creativity, musical ability, teacher attitudes, attitudes of gifted children, language arts curriculum, types of thinking, prediction of academic success, and grouping. (CB)

## ABSTRACT 8

EC 001 487 ED 018 900
Publ. Date 66 9p.
Starkweather, Elizabeth K.
**Potential Creative Ability and the Preschool Child.**
Oklahoma State University, Stillwater
EDRS mf,hc

Descriptors: exceptional child research; gifted; preschool children; creativity; creative thinking; behavior; conformity; curiosity; research needs; measurement; measurement techniques; originality; task performance; motivation; research problems

A study which used a variety of behavioral tasks to study potential creativity in preschool children is presented. The behavioral tasks, especially designed for measurement of young children, are described on the dimensions of psychological freedom, willingness to try difficult tasks, freedom in use of conforming and nonconforming behavior, curiosity, and originality. The paper focuses upon the difficulties in measurement of young children and the need for other instruments, and proposes research about forces related to the development of characteristics of potentially creative children. The possibility that teachers could provide the child with the knowledge and experiences essential for responsible freedom to express creative abilities is explored. Five references are included. This document was published in The Proceedings from the First Seminar on Productive Thinking in Education, Malecaster College, St. Paul, Minnesota, pages 97-107, January 1966. (CB)

## ABSTRACT 9

EC 002 343 ED 018 059
Publ. Date 67 53p.
Kirk, Samuel And Others
**Current and Recent Research--1967.**
Institute For Res. On Except. Children, Urbana, Ill.
EDRS mf,hc

Descriptors: exceptional child research; behavior; learning; teaching methods; research reviews (publications); individual characteristics; deaf; emotionally disturbed; children; gifted; learning disabilities; mental retardation; child development; abstracts; behavior problems; mentally handicapped; social characteristics; physical characteristics; learning characteristics; disadvantaged youth

Current and recent research programs at the Institute for Research on Exceptional Children in Urbana, Illinois, are reviewed. Each of the programs focuses upon the social, mental, and physical characteristics differentiating the exceptional child from the normal child. The range of the problems covered is further identified as (1) interpersonal associations and behavior and (2) intrapersonal and physiological functioning. Included in the document are an explanatory introduction and an acknowledgment of multiple influences which lists the location of research facilities, the names of the staff, and the sources of financial support. Forty-four current and recent research programs of the Institute are first listed by title within the areas of the cultural difference, deafness, emotional disturbance, giftedness, learning disability, mental retardation, and related child development research. Each research program is described by an abstract which provides title, investigator, source of support, problem investigated, procedure followed, and results obtained. In addition, 61 doctoral dissertations supported by the Institute, both completed and in progress, are listed with title, author, and date for the years 1950 to 1967. (JD)

## ABSTRACT 10

EC 001 067 ED 018 025
Publ. Date 64
Bryan, J. Ned
**Building a Program for Superior and Talented High School Students.**
North Central Assn. Coll. And Sec. Sch., Chicago, Ill.
EDRS not available

Descriptors: exceptional child education; gifted; administration; personnel; program planning; identification; guidance; motivation; curriculum; administrative policy; talented students; educational practice; educational principles; boards of education; administrator role; responsibility; college faculty; community organizations; national organizations; program development; special programs; parents; guidance personnel; teachers; parent role; teacher role

Based upon 3 years of experience with the Project on the Guidance and Motivation of Superior and Talented Students (STS Project), this publication presents materials in two sections--(1) practices and emerging principles and (2) roles and responsibilities of individuals and groups. Assumptions, procedures to be used, and resultant principles are summarized on outline charts introducing chapters on identification, guidance services, motivation, and administrative and curricular provisions. Functions and suggested procedures for the board of education, teacher, administrator, guidance specialist, parent, community groups, and college and university personnel are offered. The roles of related state, national, and regional organizations are described. An annotated list of 12 publications of the STS Project is provided. This document is available from the North Central Association, 5454 South Shore Drive, Chicago, Illinois 60615 for $1.00. (SH)

## ABSTRACT 11

EC 001 068 ED 018 026
Publ. Date 64
**Problems, Practices, Procedures, a Report from 62 Project Schools.**
North Cent. Assn. Of Coll. And Sec. Sch., Chicago, Illinois
EDRS not available

Descriptors: exceptional child education; gifted; counseling; motivation; talented students; high school students;

identification; curriculum; grouping (instructional purposes); teaching methods; teacher selection; teacher education; tests; testing; student evaluation; school community relationship; parent school relationship; interinstitutional cooperation; program evaluation; surveys; questionnaires; educational problems; educational practice

The bulletin reviews a 5-year survey of activities in 100 pilot high schools participating in the Project on Guidance and Motivation of Superior and Talented Secondary School Students (STS Project). The 14 areas surveyed are identification, counseling, curriculum, grouping and programing, effective teaching procedures, the selection and preparation of teachers, motivation, the use of tests, marking and records, working with parents, relating the communities to the program, articulation, followup, and evaluation. The problems, most successful practices, and recommendations on the 14 surveyed areas are summarized from opinions on the questionnaire returns from the 62 responding schools. An annotated listing of 12 publications of the STS Project is provided. This document is available from the North Central Association, 5454 South Shore Drive, Chicago, Illinois 60615, for $1.25. (RM)

## ABSTRACT 12

EC 000 233 ED 017 084
Publ. Date 63 377p.
Kirk, Samuel A.; Weiner, Bluma B.
**Behavioral Research on Exceptional Children.**
Council For Exceptional Children, Washington, D.C.
EDRS mf

Descriptors: exceptional child research; behavior; administration; adolescents; aurally handicapped; special health problems; blind; children; deaf; delinquency; delinquents; educable mentally handicapped; educational research; emotionally disturbed; gifted; hard of hearing; language handicapped; learning disabilities; literature reviews; mentally handicapped; minimally brain injured; orthopedically handicapped; psychological studies; partially sighted; perceptually handicapped; physically handicapped; research reviews (publications)

This monograph provides reviews of behavioral research studies which include author, title, purpose, subjects, methods or procedures, and results. Reviews are grouped by 11 exceptionality areas and administration of special education. The areas of exceptionality are (1) gifted, (2) educable mentally retarded, (3) trainable mentally retarded, (4) visually impaired, (5) hard of hearing, (6) deaf, (7) cerebral dysfunction, (8) orthopedic handicaps and special health problems, (9) speech and language impairments, (10) emotionally disturbed, and (11) delinquents. Introductory remarks for each area and comments by the reviewer on some studies are included. An author index is included. This document was published by The Council for Exceptional Children, 1201 16th Street, N.W., Washington, D.C. 20036, and is available paperbound as stock number 551-19530 for $4.50 or clothbound as stock number 551-19532 for $6.50. (MY)

## ABSTRACT 13

EC 000 546 ED 017 090
Publ. Date May 64 151p.
Yamamoto, Kaoru
**Experimental Scoring Manuals for Minnesota Tests of Creative Thinking and Writing.**
Kent State University, Ohio, Bur. Of Educ. Research
EDRS mf,hc

Descriptors: exceptional child research; gifted; tests; creative thinking; test interpretation; children; creative writing; creativity research; elementary grades; group tests; scoring; test reliability; test validity; Minnesota Tests of Creative Thinking and Writing

Proposed scoring procedures for the Minnesota Test of Creative Thinking and Writing are described. Test forms for six verbal tasks and three nonverbal tasks are presented. For most tasks, this scoring manual has extracted from the test protocols four scores to represent four abilities of creative thinking--fluency, flexibility, originality, and elaboration. The detailed scoring instructions include explanations of scoring procedures and scored sample responses. Data on interscorer reliabilities, test-retest reliability, intercorrelations among scores, validity, norms, and correlations with scores from earlier measures, are based on subjects in grade 5, grade 10, and college, and are presented in 20 tables. A first revised edition of a scoring manual for imaginative stories, grades 3 through 6, is presented. For each of two forms, subjects write a story on one topic chosen from the list of 10 topics. The scoring scheme employs five subdivisions under the categories, organization, sensitivity, originality, imagination, psychological insight, and richness. A supplementary scoring guide evaluates originality (nine subdivisions) and interest (nine subdivisions). For both scoring schemes on imaginative stories, scoring procedures are described and examples of scored responses are included. Preliminary norms and some data on reliability of scoring are presented. A reference list of 17 items is included. (JA)

## ABSTRACT 14

EC 000 818 ED 013 697
Publ. Date 66
Franseth, Jane; Koury, Rose
**Survey of Research on Grouping as Related to Pupil Learning.**
Office Of Educ., Washington, D.C., Bur. Elem. Sec. Educ.
OE-20089
EDRS not available

Descriptors: exceptional child research; administration; grouping (instructional purposes); ability grouping; heterogeneous grouping; individual differences; learning; educational research; elementary grades; emotional development; group dynamics; grouping procedures; homogeneous grouping; literature reviews; nongraded classes; nongraded system; peer groups; social development; values; sociometric techniques; student grouping; student teacher relationship; gifted; mentally handicapped; Joplin Plan

The research that has been done in the area of grouping in the classroom and school system is explored. Nationwide studies on grouping practices in the elementary school are reviewed. Ability and heterogeneous grouping (broad, medium, and narrow range classes, and the Joplin Plan) are compared, and varieties of ability grouping are explored. The effect of ability grouping on achievement motivation is reviewed with reference to superior and low ability students. The range of individual differences, group situations as they influence the individual learner, the nongraded concept, and the need for flexibility in grouping are treated. Sociometric patterns in ability and heterogeneous classes and the effects of sociometric techniques for grouping are discussed. Grouping effects on social and emotional development, on basic human values, and on the development of human potentialities are described. Information is also provided on pupil-teacher interaction and learning. A summary of findings and conclusions is presented. References are cited. This document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for $0.40. (JA)

## ABSTRACT 15

EC 001 486 ED 017 107
Publ. Date 66 89p.
**Experiments in Musical Creativity, a Report of Pilot Projects Sponsored by the Contemporary Music Project in Baltimore, San Diego, and Farmingdale.**
Music Educators National Conference, Washington, D.C.
EDRS mf

Descriptors: exceptional child research; gifted; curriculum; music; junior high school students; elementary school students; music activities; identification; music education; teachers; inservice courses; inservice teacher education; pilot projects; creativity; music techniques; singing; creative activities; creative teaching; elementary grades; secondary grades; Baltimore; Maryland; San Diego; California; Farmingdale; New York

Three pilot projects were conducted in Baltimore, Maryland, San Diego, California, and Farmingdale, New York, with elementary and junior high school students. The projects in Baltimore and San Diego provided inservice seminars for music teachers along with pilot classes in different types of schools. Objectives of these two projects were presentation of contemporary music to children

through suitable approaches, experimentation with creative music experiences for children, identification of contemporary music appropriate at several grade levels, provision through contemporary music of new means of creative experiencing, and inservice education of teachers. The pilot project in Farmingdale was designed to demonstrate two types of creative teaching, experimental techniques in music composition using 20th century idioms and the development of musical resources through rhythmics, singing, improvisation, and composition. The interest and motivation which resulted on the part of teachers and pupils were viewed as supporting the premise that children are receptive to contemporary music and are capable of employing contemporary techniques in creative activities. Recordings of some of the contemporary music used in the projects are listed. This document was published by the Music Educators National Conference, 1201 16th Street, N.W., Washington, D.C. 20036. (CB)

## ABSTRACT 16

EC 001 798 ED 017 114
Publ. Date 67
Telford, Charles W.; Sawrey, James M.
**The Exceptional Individual, Psychological and Educational Aspects. Prentice-Hall Psychology Series.**
EDRS not available

Descriptors: exceptional child education; educational needs; environmental influences; educable mentally handicapped; trainable mentally handicapped; orthopedically handicapped; physically handicapped; speech handicapped; visually handicapped; aurally handicapped; gifted; slow learners; culturally disadvantaged; creativity; socially deviant behavior; delinquency; children; adolescents; adults; individual differences; exceptional (atypical); cultural background; cultural context; cultural environment; delinquents; textbooks

Intended for use in a survey course at the upper division or graduate level, this text looks at exceptionality from a cultural frame of reference and considers the psychological and educational problems of exceptional children, adolescents, and adults. Part one, an introduction to exceptionality, contains chapters on basic psychological and social considerations, somato-psychological relationships, care and education of the exceptional child, an family and personal problems of exceptional people. Parts two through five contain chapters about the intellectually superior, creativity, the mentally retarded, borderline intelligence, the mildly mentally retarded, the severely mentally retarded, the visually handicapped, the aurally handicapped, the orthopedically handicapped, the epileptic, speech handicaps, social deviance, and the culturally disadvantaged. Reference lists follow each chapter. This document was published by Prentice-Hall, Englewood Cliffs, New Jersey 07632, and is available for $7.95. (DF)

## ABSTRACT 17

EC 000 565 ED 019 763
Publ. Date 31 Mar 67 46p.
Plowman, Paul D.; Rice, Joseph P.
**Demonstration of Differential Programming in Enrichment, Acceleration, Counseling, and Special Classes for Gifted Pupils in Grades 1-9. Final Report.**
California State Dept. Of Educ., Sacramento
OEC-10-109
EDRS mf,hc

Descriptors: exceptional child education; gifted; teaching methods; professional education; counseling; curriculum; enrichment programs; acceleration; special classes; inservice teacher education; curriculum development; audiovisual instruction; teacher workshops; elementary schools; junior high schools; program development; demonstration projects; special programs; advanced placement programs; identification; group counseling; consultants; counseling; instructional programs; material development; California; California Project Talent

California Project Talent was a 3 1/2-year project which demonstrated four types of programs for gifted children and youth. The enrichment demonstration analyzed the needs for inservice training of teachers, developed appropriate workshops and also invented, field tested, and disseminated special pupil units in (1) scientific discovery, methodology, and investigation through a study of graphic representation of statistical information using the Bloom Taxonomy, (2) creative expression through a study of the literary element of characterization using Guilford's Structure of Intellect Model, and (3) critical appreciation through a study of the fundamental forms of music using Bruner's Process of Education. The acceleration demonstration involved individual placement procedures and accelerated pupils from grades 2 to 4 by using a special summer session and by employing extensive case studies, counseling, and tutoring. The counseling-instructional demonstration showed interrelated goals, processes, and contents of English, social sciences, guidance, and small group counseling designed to improve communication skills, encourage development of values and philosophy of life, and promote more effective learning in social sciences and in English in grades 7 to 9. The special class demonstration showed the unique value of the all day, full week special class setting in improving problem solving, the ability to apply facts and principles, and insight into the nature of learning. Overall, (1) four new programs were invented, adopted, demonstrated, and disseminated, (2) related consultant, teacher, and counselor roles were described, (3) products produced included a film series, filmstrip, and program guidelines, and (4) gifted child programs were promoted, enriched, and expanded. A reference list cites 62 items. Appendixes provide project reports and case studies, list project developed films and guidelines, and present research related materials. (AA)

## ABSTRACT 18

EC 000 568 ED 013 514
Publ. Date 64 28p.
**Arithmetic Enrichment Ideas for Grades 1, 2, and 3.**
Ohio State Dept. Of Educ., Columbus, Div. Spec. Educ.
Cincinnati Public Schools, Ohio, Dept. Of Instr.
EDRS mf,hc

Descriptors: exceptional child education; mathematics; gifted; enrichment activities; arithmetic; grade 1; grade 2; grade 3; primary grades; mathematical enrichment; curriculum enrichment; public schools; Columbus

The document contains numerous specific activities for understanding elements of the numeration system, fundamental operations, and other concepts such as time, fractions, and approaches to geometry. A number of games and puzzles are included. The activities were developed by teachers at a University of Cincinnati workshop for the improvement of arithmetic programs for academically gifted children. (RM)

## ABSTRACT 19

EC 000 569 ED 012 995
Publ. Date 66 128p.
Gibbony, Hazel L.
**Enrichment--Classroom Challenge.**
Ohio State Dept. Of Education, Columbus
EDRS mf,hc

Descriptors: exceptional child education; curriculum; gifted; enrichment activities; teaching guides; elementary grades; secondary school science; social studies; English; Latin; instructional media; community resources; Columbus

This manual contains suggestions for enrichment in language arts, social studies, science, arithmetic, foreign languages, art, and music at the elementary level and in English, social studies, science, mathematics, modern languages and Latin, art, and music at the secondary level. Additional sections include information on the use of community resources, sources for pen pals, instructional media, and the library. Activities are designed for individuals, small groups, and entire classes. The manual may be used by regular teachers, teachers of the gifted, and students. More than 50 bibliographic items are listed. (RM)

## ABSTRACT 20

EC 000 571 ED 013 515
Publ. Date 63 159p.
**Teachers' Guides, World History for the Academically Talented, Advanced Placement European History.**
Ohio State Dept. Educ., Columbus, Div. Spec. Educ.
Cleveland Public Schools, Ohio, Div. Social Studies
EDRS mf,hc

Descriptors: exceptional child education; curriculum; gifted; social studies; advanced placement; curriculum guides; european history; world history; units of study (subject fields); instructional materials; adolescents; secondary grades; Columbus

Prepared by teachers and supervisors working with a 2-year demonstration project, this document contains guides for a world history course (prehistory to early 20th century) for the gifted and an advanced placement course in European history (ancient civilization to early 20th century). Students are expected to study historical issues and develop research skills, scholarship, and ability in the preparation of reports and essays. In the Gifted Course, learning process is stressed. Mastery of content and the use of advanced analytic techniques are aims of the advanced placement course. Each course is scheduled for two semesters. For the units of each course, time allotments, outline of topics, readings, learning aids, discussion and study questions, and map studies are provided. Supplementary reading lists are included. (RM)

## ABSTRACT 21

EC 000 573 ED 013 516
Publ. Date Dec 62 50p.
**Educating the Highly Able, a Policy Statement.**
Maryland State Dept. Educ., Baltimore
EDRS mf,hc

Descriptors: exceptional child education; administration; gifted; intellectual development; ability identification; superior students; able students; state programs; school responsibility; program guides; personnel; administrative policy; Baltimore

The document constitutes a policy statement for use in Maryland schools. High ability is regarded as inclusive and is manifested by high intelligence, and/or creativity, leadership, and skilled performance in motor areas. Teachers and counselors are assigned a key role in identifying the highly able. Standarized tests are acknowledged as the most efficient single instrument for identification, although cautions are enumerated for their use. Suggestions for planning learning experiences to foster self expression, effective communication, the use of special abilities, breadth and depth of the learning experience, self direction, and desirable self concepts are presented. The roles of the teacher, principal, and some views on administrative arrangements are described. The library is paid special attention as an important center of learning. A statement of guiding principles for the schools and the State Department of Education is given. The guidelines for action include recommendations that the school systems appoint planning for the highly able. This document is the Maryland School Bulletin, Volume 39, Number 1. (RM)

## ABSTRACT 22

EC 000 574 ED 013 517
Publ. Date 63 260p.
**Teachers' Guides, Ninth Grade Plane and Solid Geometry for the Academically Talented.**
Ohio State Dept. Educ., Columbus, Div. Spec. Educ.
Cleveland Public Schools, Ohio, Div. Of Mathematics
EDRS mf,hc

Descriptors: exceptional child education; mathematics; gifted; plane geometry; solid geometry; curriculum guides; units of study (subject fields); grade 9; program evaluation; accelerated courses; Columbus

A unified two-semester course in plane and solid geometry for the gifted is presented in 15 units, each specifying the number of instructional sessions required. Units are subdivided by the topic and its concepts, vocabulary, symbolism, references (to seven textbooks listed in the guide), and suggestions. The appendix contains a fallacious proof, a table comparing Euclidean and non-Euclidean geometry, projects for individual enrichment, a glossary, and a 64-item bibliography. Results of the standardized tests showed that the accelerates scored as well or better in almost all cases than the regular class pupils, even though the accelerates were younger. Subjective evaluation of administration, counselors, teachers, and pupils showed the program was highly successful. (RM)

## ABSTRACT 23

EC 000 576 ED 013 518
Publ. Date 64 86p.
Barbe, Walter B.; Horn, R. A.
**One in a Thousand: A Comparative Study of Moderately and Highly Gifted Elementary School Children.**
Ohio State Dept. Educ., Columbus, Div. Spec. Educ.
Kent State Univ., Ohio, Dept. Spec. Educ.
EDRS mf,hc

Descriptors: exceptional child research; identification; gifted; student characteristics; children; elementary grades; family background; educational experience; physical development; adjustment (to environment); ability identification; talent identification; creativity; personality; socioeconomic background; Iowa Tests of Basic Skills; Stanford Binet Intelligence Test; Childrens Personality Questionnaire; CPQ; IPAT; Columbus

Moderately gifted and highly gifted children were studied to determine differences in educational development, adjustment, physical development, and family background. School psychology interns nominated potentially capable pupils from grades 3 to 6. From these, 65 matched pairs of moderately gifted (IQ scores of 120 to 130) and highly gifted (IQ scores of 148 and above) were selected. Stanford-Binet Intelligence Test scores, Iowa Every Pupil Test of Basic Skills scores, Institute for Personality and Ability omitting Children's Personality Questionnaire scores, parent ratings of child, autobiographies, Who Is It scores, school records, socioeconomic levels, and home information were obtained. Structured interviews and instruments measuring creativity and self concept were used with 40 of the subjects. Findings indicated that the highly gifted group came from more affluent backgrounds, had more highly educated parents, and rated higher on creativity measures. Both groups were found to be well adjusted, and there were no outstanding differences of physical development. Teachers did not identify 25 percent of the highly gifted. Large numbers would have been missed through reliance on group tests. The study recommends a state registry of highly gifted children, summer workshops for teachers, and excess cost support. (RM)

## ABSTRACT 24

EC 002 189 ED 021 368
Publ. Date Nov 67 44p.
Truax, Anne, Comp.
**Basic Reference Books Recommended for Use with Gifted Children, an Annotated Bibliography.**
Rand Council Of Northeast Minnesota, Duluth
EDRS mf,hc

Descriptors: exceptional child education; gifted; instructional materials; reference books; booklists; humanities; history; social sciences; sciences; annotated bibliographies

Intended primarily for use by gifted children and their teachers, this annotated list of approximately 200 references in print is classified in five subject categories--general, humanities, social sciences, history, and science. References selected are recommended for their accuracy and comprehensiveness. Entries are coded to indicate both basic and supplementary books. (JP)

## ABSTRACT 25

EC 000 844 ED 019 770
Publ. Date 67 72p.
Martinson, Ruth A.; Seagoe, May V.
**The Abilities of Young Children. CEC Research Monograph Series.**
Council For Exceptional Children, Washington, D. C.
EDRS mf

Descriptors: exceptional child research; gifted; cognitive processes; creativity; children; creativity research; sciences; social studies; intermediate grades; originality; creative writing; student ability; evaluation criteria; music; art; intelligence tests; Guilford Hoepfner Measures of Intellectual Ability

In order to assess the quality of creative products in art, music, writing, social studies, and science, children attending grades 3 to 6 of the University Elementary School of the University of California, Los Angeles, were divided into two groups on the basis of intelligence. The higher group (49 pupils, IQ of 130 or more) and the low group (57 pupils, IQ of 120 or less) were similar in educational backgrounds, external environment, parental valuing of education, parental level of education, and sex ratio. Three

independent judgments of each child's product in each subject were made by experts in the particular field represented. Criteria for creativity included originality and effectiveness of expression. In five out of the eight products evaluated, a significant relationship (p equals .05) was found between high IQ and high quality of judged product. Findings thus supported the hypothesis that giftedness and creativity are not antithetical. Both groups were also given Guilford and Hoepfner's test for divergent thinking. The only test which significantly separated the high from the low groups was the Association Test (t test, p equals .05). Since no significant differences were found between high and low IQ groups on the four remaining tests, a negligible relationship between intelligence and divergent thinking was indicated. Examples of the children's products in all areas and an 18-item reference list are included. The appendix contains biographical sketches of the judges. This document is available from The Council for Exceptional Children, NEA, 1201 Sixteenth Street, N.W., Washington, D.C. 20036, for $2.00. (JP)

### ABSTRACT 26

EC 000 833 ED 021 351
Publ. Date May 62 31p.
Herring, Lewis Homer
**Provisions and Procedures for the Rapid Learner in Selected Texas Junior High Schools.**
Texas Study Of Secondary Education, Austin
EDRS mf,hc
TSSE-RES-BULL-34
Mrs. Mae Cowan, Secretary, The Texas Study Of Secondary Education, 417 Sutton Hall, The University Of Texas, Austin, Texas 78701 ($1.00).

Descriptors: exceptional child research; gifted; administration; curriculum; questionnaires; junior high schools; English; social studies; mathematics; sciences; home economics; industrial arts; guidance; identification; school surveys; educational practice; educational improvement; Texas

The study attempted to survey the administrative, guidance, and curriculum practices employed by selected junior high schools in the state of Texas, and to compile the findings of the research in such a manner that other teachers confronted with the rapid learner in the junior high school might have a tangible source of provisions and techniques used by successful teachers. The 40 final participants completed questionnnaires adapted to the junior high school level from a study by the U.S. Office of Education. The questionnaire consisted of three categories: administrative provisions; discovering the rapid learners; and instructional provisions and procedures in English, social studies, mathematics, science, home economics, and industrial arts. Results prompted recommendations that a plan for locating the rapid learner be provided and that organized programs of learning experiences for the special abilities of rapid learners be established. Nine tables, lists, and explanations of data are provided. A bibliography cites 19 items. (RM)

### ABSTRACT 27

EC 001 482 ED N.A.
Publ. Date 64 389p.
Steigman, Benjamin M.
**Accent on Talent; New York's High School of Music and Art.**
EDRS not available
Wayne State University Press, 5980 Cass, Detroit, Michigan 48202 ($7.95).

Descriptors: exceptional child education; gifted; art; music; school activities; school curriculum; school environment; school attitudes; special schools; educational facilities; creativity; educational programs; secondary school students

The establishment of New York's High School of Music and Art, its admission criteria and course of study, and the personal characteristics of students and alumni are discussed. Aspects covered are the school's history and setting; testing for admission, the music and art curriculum, and guest artists and musicians. The school's academic course of study is described in terms of the rationale behind an ideal curriculum of 4 years of history, science, and the humanities and a flexible foreign language requirement. The students' extracurricular activities and interests, the individual guidance given them, and the graduates' accomplishments and evaluation of the school are presented. (SN)

### ABSTRACT 28

EC 001 573 ED N.A.
Publ. Date 61 50p.
De Haan, Robert F.
**Guidelines for Parents of Capable Youth.**
North Central Association Of Colleges And Secondary Schools, Chicago, Illinois
Carnegie Corporation, New York, New York
EDRS not available
Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611 (reorder Number 5-44).

Descriptors: exceptional child education; gifted; family (sociological unit); adolescents; parent education; student characteristics; parent school relationship; community resources; special programs; parent student relationship; college preparation; guidance; parent role; child rearing

Directed to parents of gifted teenagers, this publication gives a composite picture of an adolescent and presents giftedness in terms of home, school, parent, and child relationships. The nature of giftedness and of the misconceptions of it are discussed. Cooperation with the school is considered in terms of school relations, identification of talented teenagers, the IQ, and essentials of a school's program for developing talent. The parents' role in helping the adolescent to set up goals and in providing understanding, acceptance, love, affection, encourgement, supervision, and good study arrangements is described. The problem of underachievement is examined. Future planning for the gifted is discussed, including planning a career, college education, preparation for college in high school, procedures for selection of and application to college, the cost of education, and financial aid programs. The use of community resources for the development of talent is mentioned. Case studies of a science service and a children's theater and an annotated reading list of 10 books are provided. (SN)

### ABSTRACT 29

EC 002 589 ED 023 217
Publ. Date 66 82p.
**Hampshire Country School Staff Commitments.**
**Hampshire Country School, Rindge, New Hampshire**
**EDRS mf,hc**

Descriptors: exceptional child education; gifted; emotionally disturbed; personnel standards; residential schools; contracts; specifications; teacher responsibility; teacher qualifications; program administration; program descriptions; student behavior; professional standards; behavior standards

Intended for professional personnel of the Hampshire Country School, which treats gifted children with immobilizing emotional dysfunctions, the handbook specifies staff commitments. The Code of Ethics, adapted from the National Education Association Code as supplemented by The Council for Exceptional Children, sets forth four principles: commitment to the student, to the community, to the profession, and to professional employment practices. A conceptual framework of the school program outlines the rationale of administrative organization and practices, houseparenting, coeducation, extracurricular activities, and the interdependence of specific areas and the totality of the therapeutic community. Qualifications of staff are discussed, and the following are provided: a manual listing rules and regulations, a policy statement on student smoking, and an employee copy of the school contract. (JD)

### ABSTRACT 30

EC 000 830 ED 021 350
Publ. Date 62 71p.
Smith, Donald C.
**Personal and Social Adjustment of Gifted Adolescents. CEC Research Monograph, Series A, Number 4.**
Council For Exceptional Children, Washington, D. C.
EDRS mf
The Council For Exceptional Children, NEA, 1201 16th Street, N. W., Washington, D. C. 20036 ($2.00).

Descriptors: exceptional child research; gifted; adjustment (to environment); personality; behavior; adolescents; personal

adjustment; social adjustment; self concept; self evaluation; interpersonal relationship; personality assessment; peer groups; intelligence factors; conformity; responsibility; Thematic Apperception Test; LaForce Suczek Interpersonal Check List

The study examined similarities and differences in the personal and social adjustment of intellectually gifted and average adolescents along six criteria: independent-dominant and responsible-cooperative interpersonal behavior, moderation of interpersonal behavior, unity or integration of personality, self acceptance, and accuracy of self perception. Two matched groups of 42 subjects each, one with IQ's from 130 to 150, the other with IQ's between 90 to 110, completed the Thematic Apperception Test (TAT) and the LaForge-Suczek Interpersonal Check List. Additional interpersonal ratings were secured from teachers and classmates. Results on interpersonal behavior indicated that the superior students were significantly higher in independent-dominant traits, aggressive-rebellious traits, and responsible-cooperative traits. On the TAT average students expressed a higher proportion of themes of masochism-weakness and conformity-trust. On concepts of ideal traits a significantly larger number of average subjects fell above the median on the responsible-cooperative cluster. On all other items, superior students failed to differ significantly. It was thus concluded that factors other than intellect influence personal and social adjustment. Earlier studies are reviewed, and 76 references are cited. Twenty-five tables and an appendix present data. (JD)

## ABSTRACT 31

EC 001 579 ED 022 273
Publ. Date 65 28p.
Roberts, Roy J.
**Prediction of College Performance of Superior Students.**
National Merit Scholarship Corporation, Evanston, Illinois
EDRS mf,hc
National Merit Scholarship Corporation, 990 Grove Street, Evanston, Illinois 60201.
National Merit Scholarship Research Reports; V1 N5 1965

Descriptors: exceptional child research; gifted; achievement; academic achievement; grades (scholastic); high achievers; low achievers; sciences; art; music; speech; writing; leadership; college freshmen; predictive validity; grade point average; predictive measurement; questionnaires

Using 857 male National Merit Finalists and Commended Students, scales to predict 1st year college grades and science, writing, art, music, speech, and leadership achievement were developed by analysis of 906 pre-college questionnaire items. Two item analysis strategies were used: responses of achieving subjects (S's) and general samples of nonachieving S's were compared; responses of achieving and nonachieving S's who had previously indicated desire to achieve were compared. The two strategies did not yield essentially different scales. Validity coefficients ranged from .15 to .38 with 300 cross-validation S's; similar correlations resulted from applying the scales to 681 female S's. More items about past accomplishment, activities, and competence entered the scales than did other item types, relative to the size of the item pools. The content of the scales and the correlations among variables support some unfavorable interpretations of high grade achievement. Results suggest the hypothesis that the grade scales should be a negative predictor of nonacademic achievement, and the nonacademic scales should predict grades negatively. (Author/JD)

## ABSTRACT 32

EC 002 467 ED 023 206
Publ. Date (66) 43p.
Gallagher, James J.
**Teacher Variation in Concept Presentation in BSCS (Biological Sciences Curriculum Study) Curriculum Program.**
Illinois University, Urbana, Institute For Research On Exceptional Children
Office Of Education (DHEW), Washington, D. C., Bureau Of Research;
Biological Sciences Curriculum Study, Boulder, Colorado
EDRS mf,hc
OEG-6-10-196
BR-5-0585

Descriptors: exceptional child research; gifted; sciences; teaching methods; curriculum; teachers; concept teaching; biological sciences; teaching programs; program content; teaching styles; classes; biology instruction; high achievers; scientific concepts; interaction; interaction process analysis; Biological Sciences Curriculum Study; BSCS

As a result of the Biological Sciences Curriculum Study (BSCS), instructional content and style were studied in six teachers teaching the concept of photosynthesis. The same BSCS curriculum program was used by all six teachers; all six had some previous BSCS training. The students in the six classes had been selected on the basis of high ability and/or high achievement. Three consecutive class sessions were recorded during the introduction of photosynthesis and analyzed by the topic classification system of Aschner, Gallagher, and others. Significant interteacher variations were found on dimensions on teacher intent and level of conceptualization but not on teacher style. Wide variations were found among emphases on various biological concepts or background materials. It was thus concluded that using the same curriculum materials does not insure similar instruction. (Author/JD)

## ABSTRACT 33

EC 002 615 ED 024 172
Publ. Date Mar 68 107p.
Blake, Kathryn A.; Williams, Charlotte L.
**Knowledge of English Morphology Exhibited by Intellectually Retarded, Normal, and Superior Children in the CA Four to Twelve Year Range.**
Georgia University, Athens, Research And Development Center In Educational Stimulation
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-6-10-061
BR-5-0250

Descriptors: exceptional child research; language; gifted; mentally handicapped; average students; educable mentally handicapped; intelligence differences; language patterns; age differences; morphology (languages); morphemes; language skills; language ability; structural linguistics; English; linguistics

Knowledge of English morphology was studied in intellectually retarded (IQ 50 to 80), normal (IQ 90 to 110), and superior (IQ 120 plus) children at four chronological age (CA) levels from 4 to 12. The task involved using inflectional and derivational suffixes at two levels of generality: producing inflected and derived forms of English words, and applying rules of English morphology to provide inflected and derived forms of new (nonsense) words. Results indicated that some suffixes were used with perfect accuracy by younger children, whereas other suffixes were not used accurately even by older children; however, for most suffixes accuracy of use increased with age. Some suffixes were used by all three groups with similar accuracy at earlier CA's; most were used more accurately at the earlier CA's by the more intelligent children with the differences disappearing at later CA's; and some were used more accurately by the more intelligent children at both the earlier and later CA's. Study of the variations in generality revealed that, although some suffixes were used more accurately with English words than with new words, most suffixes were used with similar accuracy at both levels of generality. Accuracy in using suffixes differed among morphemes, with larger differences for younger, less intelligent children and smaller ones for older, more intelligent children. (Author/JD)

## ABSTRACT 34

EC 002 820 ED 024 185
Publ. Date June 68 185p.
Martinson, Ruth A.; Wiener, Jean
**The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students. Final Report.**
California State College, Gardena
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-4-6-061244-8948
BR-6-1244

Descriptors: exceptional child research; gifted; professional education; teaching methods; behavior; teaching models; teacher characteristics; inservice teacher

education; teacher improvement; teacher rating; test reliability; behavior rating scales; test results; questioning techniques; teacher selection; teacher behavior

Inservice self-study was utilized to improve the qualitative level of classroom method among teachers of the gifted. Ten judges selected 45 to 75 elementary and secondary teachers by a rating scale of significant behaviors, classroom observation ratings, the Weiner Attitude Scale, and the Terman Concept Mastery Test. The 45 were considered flexible, intelligent, creative, and stimulating. Analysis of the teacher behavior scale indicated four main factors: individualized materials and instruction, art of questioning, encouragement of higher level learning, and communication-interaction. Inservice activities were pupil study (case studies) of gifted characteristics, study of classroom principles for higher level thinking, and discussion and evaluation of a teacher model; teacher-made videotapes of classroom activities, using the principles learned, were also shown and evaluated at the inservice meetings. Interjudge reliabilities of .90 were obtained from audiotape analysis of the teachers' questions and answers at the beginning and end of the project. Significant improvement between the two tapes (p equals .01) occurred in the application, generalization, and synthesis questions by the teacher (indicating growth in higher cognitive level questions), and growth in open responses by students were noted. (Author/SN)

## ABSTRACT 35

EC 003 138 ED 003 705
Publ. Date 65 63p.
Gold, Marvin J.
**Effects of Self-Directed Learning on Gifted Elementary School Children.**
Syracuse University, New York, Research Institute
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-5-10-169 CRP-S-174

Descriptors: exceptional child research; achievement; teaching methods; gifted; adjustment (to environment); elementary school students; academic achievement; achievement gains; study skills; critical thinking; personal adjustment; social adjustment; student development; autoinstructional methods; reading; social studies; sciences; test results; self directed classrooms; resource materials; intermediate grades

Gifted school children worked for a period of several months in self directed learning situations in a resource room without teacher imposed direction. They had opportunities to explore areas of interest (during two class periods per day) in reading, social studies, and science in the manner and depth which they chose. Pretests and posttests were administered to measure student growth in academic achievement, study skills, divergent thinking, and personal and social adjustment. Test results were compared with those of a random control sample which had no contact with self directed learning. Other information was gathered through daily logs maintained by resource room personnel. Both the experimental group and the control group were chosen from fourth, fifth, and sixth grade classrooms and were considered to be moderately superior on various intellectual measures. Little difference was noted between the two groups on gains made in academic achievement, study skills, and divergent thinking ability. Personal and social adjustment appeared to be favorably affected when self direction was used. (JH)

## ABSTRACT 36

EC 002 095 ED N.A.
Publ. Date (65) 134p.
Cegelka, Walter J.
**Readings in Counseling Parents of Exceptional Children.**
EDRS not available
Selected Academic Readings, Inc., College Division, 830 Broadway, New York, New York 10003.

Descriptors: exceptional child education; counseling; family (sociological unit); children; parent counseling; mentally handicapped; gifted; underachievers; emotionally disturbed; speech handicapped; aurally handicapped; visually handicapped; physically handicapped; minimally brain injured; deaf; blind; cerebral palsy; stuttering; learning disabilities

Eighteen articles, collected and reprinted from 10 different journals dating from 1945 to 1965, treat counseling procedures and problems in dealing with parents. Counseling of parents whose infants or older children may be retarded, gifted, underachievers, emotionally disturbed, stutterers, deaf, blind, cerebral palsied, or brain injured is discussed. Among methods mentioned are parent-teacher conferences, psychotherapy for parents, group counseling, therapy, and consultation. (DF)

## ABSTRACT 37

EC 002 327 ED N.A.
Publ. Date 61 414p.
Fliegler, Louis A., Ed.
**Curriculum Planning for the Gifted.**
EDRS not available
Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Descriptors: exceptional child education; gifted; curriculum; program planning; language arts; social studies; arithmetic; sciences; mathematics; reading; creative writing; languages; creative art; music; creative dramatics; curriculum planning; teaching methods; elementary schools; secondary schools; administration

Designed for teachers, administrators, and curriculum specialists, the book is a resource compendium or a basic text on curriculum development for the gifted. Basic problems, principles of curriculum construction, program development, and administrative provision are discussed. Content, skill development, pupil identification, and enrichmen. activities are included for each of these subject areas: social studies, arithmetic, creative mathematics, elementary and secondary science, creative writing, reading, foreign languages, creative art, music, and dramatics. Curriculum implementation is also considered. (JM)

## ABSTRACT 38

EC 002 728 ED N.A.
Publ. Date Dec 67 5p.
Rice, Joseph P.; Banks, George
**Opinions of Gifted Students Regarding Secondary School Programs.**
California State Department Of Education, Sacramento;
San Diego City Schools, California
EDRS not available
Exceptional Children; V34 N4 P269-73 Dec 1967

Descriptors: exceptional child research; gifted; curriculum; community programs; advanced placement; educational philosophy; student attitudes; curriculum evaluation; question answer interviews; interviews; student opinion; secondary school students; high school curriculum

To obtain recommendations for academic program change, a state consultant interviewed 119 gifted (Binet IQ above 155) and gifted (Binet IQ 130 to 154) students. The students suggested that curriculum design provide more freedom in course selection, less physical education and home economics, individualized spcialization, and more social sciences; their most popular courses were social sciences, science, math, language arts, and foreign languages. Over 90% believed their existing program was adequate. While they rated outlet for science and literary products as adequate, they indicated that fewer outlets were available for practical inventions or artistic and musical compositions. All favored some segregation of gifted students, and the highly gifted favored complete segregation. They ranked preparation for formal education and use of the intellect and promotion of critical thinking as the top two of 17 essential purposes of high school. Based on these findings, recommendations were for creation of accelerated as well as special activity curriculum groups, careful assessment of local gifted needs, increased use of psychometric data for placement, availability of counseling services, controversial issue seminars, and reevaluation of worth of non-academic offerings. (JP)

## ABSTRACT 39

EC 002 328 ED N.A.
Publ. Date 66 299p.
Cohen, Joseph W., Ed.
**The Superior Student in American Higher Education.**
EDRS not available
McGraw-Hill Book Company, 330 West 42nd Street, New York, New York 10036.

Descriptors: exceptional child education; gifted; special programs; secondary schools; universities; sciences; colleges; program evaluation; program descriptions; honors curriculum; educational history; student characteristics; liberal arts; higher education

Eleven papers discuss the honors approach, the development of the honors movement, the Inter-University Committee on the Superior Student, and characteristics, aspirations, and needs of the superior student. The following are also considered: honors and the liberal arts colleges, the university, the small private colleges, and the secondary schools; departmental honors at the University of Kansas; honors and the sciences; and the evaluation of honors programs. (JD)

### ABSTRACT 40

EC 002 453 ED N.A.
Publ. Date 65 326p.
Gallagher, James J., Ed.
**Teaching Gifted Students; A Book of Readings.**
EDRS not available
Allyn And Bacon, Inc., 150 Tremont Street, Boston, Massachusetts 02139 ($4.95).

Descriptors: exceptional child education; gifted; teaching methods; identification; curriculum; research projects; learning; intelligence; abstract reasoning; divergent thinking; creativity; curriculum development; units of study (subject fields); discovery learning; teacher attitudes; underachievers; individual characteristics; early admission; research reviews (publications)

Twenty-six collected papers consider educating gifted students. Aspects treated are the structure of the intellect, problems and means of identification of the gifted, characteristics of scientists and of the creative, independence-conformity behavior as a function of the intellect, and the temperament of the gifted. Curriculum changes in mathematics, physical science, mental health, and economic education are reported; evaluation of course content improvement is explained. Teaching methods discussed include learning by discovery and its psychological and educational rationale; stimulating inquiry and creativity; and encouraging the creative process through affective teacher behavior. Also described are the onset of underachievement in the gifted, a program for bright underachievers, three methods of assisting underachievers, the slow gifted child, individual classroom adjustment for gifted elementary students, and research on early admission. (IM)

### ABSTRACT 41

EC 000 845 ED N.A.
Publ. Date 64 36p.
**The Governor's Honors Program; a Report.**
Georgia State Department Of Education, Atlanta
EDRS not available

Descriptors: exceptional child education; gifted; curriculum; summer programs; enrichment programs; state programs; English; mathematics; sciences; social sciences; art, languages; drama; music; counseling; physical education; program descriptions; program planning; teacher selection; admission criteria; secondary school students; Georgia

An 8-week summer residential program at Wesleyan College in Macon, Georgia, was attended by 403 students identified as gifted (120 plus IQ) or talented. Faculty and staff members experienced in working with gifted and talented students were selected from 10 different states. Each student concentrated in one major curricular area selected from the program which included natural and social sciences, mathematics, English, foreign languages, art, drama, and music. The program, which was one of enrichment rather than acceleration, offered challenging activities designed to assist the student in the search for self realization, and provided an opportunity for research in curriculum and methods. While instructional time was scheduled, no mandatory study sessions were held and no credits or grades were issued. The interrelatedness of all knowledge and the basic structure of subject matter were stressed; attention was directed to the development of attitudes and ideas. Seminars were held three times weekly providing an opportunity for small group discussion on basic issues and problems of man's existence. Additional aspects of the session included a comprehensive physical education program, programs featuring outstanding guest speakers, representatives from various colleges, and student-participation entertainment. (HM)

### ABSTRACT 42

EC 001 575 ED N.A.
Publ. Date 61 84p.
Endicott, Frank S.
**Guiding Superior and Talented High School Students; Suggestions for Developing a Guidance Program for Able Youth.**
North Central Association Of Colleges And Secondary Schools, Chicago, Illinois
Carnegie Corporation, New York, New York
EDRS not available
North Central Association, 5835 Kimbark Avenue, Chicago, Illinois 60637.

Descriptors: exceptional child education; gifted; counseling; guidance services; secondary school students; identification; counselors; student needs; motivation; teachers; parents; school community relationship; guidance

Directed to administrators, counselors, and teachers in secondary schools, this publication gives information on planning programs of guidance for superior and talented students. The counselor's qualifications, responsibilities, and problems are considered, and the process of identifying superior and talented students is described. A survey of the problems and plans of 2,036 superior high school students is given; problems relating to school adjustment, future plans, the home and family, social and personal adjustment, college adjustment, and their relative importance are presented. How guidance services can help superior students vocational and educational planning are discussed. Testing services, the cumulative record, group meetings, and discussions, clubs and activities, placement services, fact-finding studies, and reporting to parents are examined. Basic consideration and specific procedures relating to motivation are given, and the counselor's relationship to teachers and parents is explored from several viewpoints. Ways of developing effective relationships in the community are described, and evaluative criteria presented. Appendixes include the identification procedure utilized by the North Central Association Project on the Guidance and Motivation of Superior and Talented High School Students (STS), a checklist for use in discovering the problems of high school students, a list of schools participating in the STS Project and 57 references. (SN)

### ABSTRACT 43

EC 002 649 ED N.A.
Publ. Date 67 243p.
Starr, Bernard D., Ed.
**Readings in Mental Health and Urban Education.**
EDRS not available
Selected Academic Readings, A Division Of Associated Educational Services Corporation, Rockefeller Center, 630 Fifth Avenue, New York, New York 10020.

Descriptors: exceptional child education; mental health; urban education; child rearing; mentally handicapped; emotionally disturbed; gifted; psychological testing; educational sociology; identification; teaching methods; teacher morale; mental health clinics; disadvantaged youth; environmental influences; Negro students; community programs; testing; creativity; followup studies; school integration

Selected journal articles include eight on mental health considering the definitions of normality and mental illness, the myth of mental illness, social change, problems of child guidance clinics, prevention of mental and emotional disorders, the ideas of Marshall McLuhan, and the effects of psychology on manpower policy. Eight articles on cultural deprivation treat the following: the social world of the slum child, child rearing in lower class families, reversibility of the effects of cultural deprivation, and goal aspirations and goal fulfillments in deprived and affluent adolescents, along with integration/segregation and character development, insulation, intellectual performance, and perceptions and feelings. Six articles on the emotionally disturbed child include a historical review of the problem, the identification of disturbed children, meeting mental health needs, teaching

techniques, classroom management, and a community educational program. Three articles on the mentally handicapped include the problem of special classes for the retarded, post-school adjustment of the retarded, and peer acceptance of a special class. Characteristics of the gifted, preschool children and reading, curriculum frontiers for elementary school students, and creativity are covered in four articles on the gifted. Classroom social structure and mental health, problems of teacher morale, anxieties in teaching, the culture fair testing movement, and an examination of the attack on testing and counseling are discussed in three articles on sociology and two on psychological assessment. (LE)

### ABSTRACT 44

EC 002 684 ED N.A.
Publ. Date 63 580p.
Dunn, Lloyd M., Ed.
**Exceptional Children in the Schools.**
George Peabody College For Teachers, Nashville, Tennessee
EDRS not available
Holt, Rinehart And Winston, Inc., 383 Madison Avenue, New York, New York 10017.

Descriptors: exceptional child education; educational needs; administration; program planning; individual characteristics; gifted; instructional materials; educational programs; incidence; mentally handicapped; identification; educable mentally handicapped; trainable mentally handicapped; emotionally disturbed; speech handicapped; aurally handicapped; visually handicapped; physically handicapped; learning disabilities; neurologically handicapped; socially maladjusted; deaf; blind; hard of hearing; partially sighted; orthopedically handicapped

Intended as a survey text for college students in special education or as a reference for non-educators associated with the schools, the book includes 10 chapters by seven authors treating exceptional children in the schools. A general overview is presented and exceptionality and the problem of adjustment are discussed. Areas of exceptionality considered include the educable mentally retarded, trainable mentally retarded, gifted, emotionally disturbed and socially maladjusted, speech impaired, deaf and hard of hearing, blind and partially seeing, and crippled and neurologically impaired. Each exceptionality is defined and discussed in terms of prevalence, identification, characteristics, educational procedures, and resources. For each, references, films, and resources are listed. (LE)

### ABSTRACT 45

EC 002 727 ED N.A.
Publ. Date Jan 68 9p.
Bishop, William E.
**Successful Teachers of the Gifted.**
Indiana Central College, Indianapolis, Department Of Education
EDRS not available
Exceptional Children; V34 N5 P317-25 Jan 1968

Descriptors: exceptional child research; gifted; teacher characteristics; personality; teacher attitudes; teacher behavior; teaching styles; teacher evaluation; teacher influence; teacher experience; student teacher relationship; secondary school teachers; personality studies; teachers; secondary school students

The study compared 109 former teachers identified by 181 student questionnaires as successful with 97 other teachers encountered by the students. Every teacher completed a copy of the Teacher Characteristics Schedule. Of those identified as successful, 30 were studied more intensively, using the Wechsler Adult Intelligence Scale, the Edwards Personal Preference Schedule, interviews, and college transcripts. Results indicated that the two groups did not differ on variables relative to sex, marital status, type of undergraduate institution attended, highest degree held, course work preparation, and extent of association with professional organizations. However, the successful teachers were found to be mature, experienced, and superior intellectually (upper 3%); were more interested in literature, the arts, and community culture; had high achievement needs; were motivated to teach by a desire for intellectual growth and predicted success; were more student centered, orderly, stimulating, and well rounded in their classrooms; and supported special educational provisions for the gifted. (JP)

### ABSTRACT 46

EC 001 322 ED N.A.
Publ. Date May 67 4p.
Chopra, Sukhendra Lal
**A Comparative Study of Achieving and Underachieving Students of High Intellectual Ability.**
Lucknow University, India, Department Of Education
EDRS not available
Exceptional Children; V33 N9 P631-4 May 1967

Descriptors: exceptional child research; gifted; high achievers; underachievers; socioeconomic influences; cultural environment; academic aspiration; occupational choice; student characteristics; family characteristics; family (sociological unit); student attitudes; India

A total of 340 male students, aged 14 to 17 years, was selected from 1,359 boys in Class X (10th grade) in 22 urban and six rural boys' schools in the Lucknow district in India. All had high ability, as defined by scores in the top 25% on the Raven Progressive Matrices. Academic achievement was measured by marks assigned by the Board of High School and Intermediate Education for the public high school examination with the top quartile and bottom quartile designated as achieving and underachieving groups respectively. Of these two groups, 76 pairs were matched by chronological age and intelligence within the same schools and were compared on socioeconomic factors as determined by a questionnaire. Achievers differed significantly from underachievers on father's occupation, family income, type of lodging, size of family, father's education, cultural atmosphere at home, subjects taken, vocational planning, planned continuation of studies, and students' valuation of academic performance (for all, p less than .01). They differed on ordinal position in family, parental supervision, and help with studies (p less than .05). It was concluded that in order to develop students' potentialities, economic assistance and free places in hostels are needed if the home environment is culturally deficient. (JP)

### ABSTRACT 47

EC 002 731 ED N.A.
Publ. Date Oct 67 5p.
Adler, Manfred
**Reported Incidence of Giftedness among Ethnic Groups.**
John Carroll University, Cleveland, Ohio
EDRS not available
Exceptional Children; V34 N2 P101-5 Oct 1967

Descriptors: exceptional child research; gifted; cognitive processes; research reviews (publications); ethnic groups; race; Caucasian race; American Indians; Negroes; Mexican Americans; Jews; minority groups; racial factors; intelligence differences; racial differences; ethnology; intelligence; incidence

Sixteen research studies on the giftedness and intelligence of ethnic groups that report national, racial, or religious distribution of differences are reviewed. Thirteen studies noted non-Caucasian ethnic differences in intellectual assessment, and groups mentioned in descending order of frequency were the Jewish, German, English and Scottish, and all others. Groups falling below the intelligence norm in descending order of frequency mentioned were the Negro, Italian, Portugese, Mexican, and American Indian. Underlying factors were not clarified; certain ethnic groups were represented in studies of gifted chidren in far greater numbers and remained fairly constant over a period of 40 years. The Jewish group was mentioned most frequently and the Negro group least frequently. More research is suggested to explain the uneven distribution of giftedness and the nature of current intelligence tests, language facility, differences in culture, socioeconomic class, environment, and schooling. A bibliography cites 27 references. (JP)

### ABSTRACT 48

EC 002 733 ED N.A.
Publ. Date Sep 67 4p.
Namy, Elmer
**Intellectual and Academic Characteristics of Fourth Grade Gifted and Pseudogifted Students.**
Ashland College, Ohio, Department Of Psychology

EDRS not available
Exceptional Children; V34 N1 P15-8 Sept 1967

Descriptors: exceptional child research; gifted; achievement; cognitive processes; identification; learning characteristics; academic ability; academic achievement; memorizing; memory; comprehension; student evaluation; intelligence tests; intelligence differences; English; rote learning; grades (scholastic); thought processes; educational strategies; testing; Wechsler Intelligence Scale for Children; WISC

To determine the characteristics of intellectual and academic differences, two groups of fourth grade students (16 boys and 16 girls) were compared. The gifted students had IQ's above 119 on the Wechsler Intelligence Scale for Children (WISC) and above 120 on the California Test of Mental Maturity (CTMM); the pseudogifted (misdiagnosed as gifted by teachers) had WISC IQ's below 120 and CTMM scores below the 90th percentile. The gifted did significantly better on WISC information, comprehension, similarities, vocabulary, picture completion, picture arrangement, and block design subtests (p equals .05); they did not differ markedly on arithmetic and coding subtests. When compared for quality of responses on similarities, comprehension, and vocabulary, gifted students were superior in defining words, making generalizations, and choosing synonyms (p less than .05). However, when compared on teacher grades, only English grades of the gifted were significantly related to WISC IQ score and higher than those of the pseudogifted (p less than .05). (JP)

## ABSTRACT 49

EC 002 792 ED N.A.
Publ. Date 65 571p.
Garrison, Karl C.; Force, Dewey G., Jr.
**The Psychology of Exceptional Children.**
EDRS not available
The Ronald Press Company, 79 Madison Avenue, New York, New York 10016.

Descriptors: exceptional child education; mentally handicapped; gifted; delinquency; aurally handicapped; speech handicapped; visually handicapped; physically handicapped; orthopedically handicapped; learning disabilities; minimally brain injured; cerebral palsy; special health problems; emotionally disturbed; socially maladjusted; social adjustment; emotional adjustment; individual characteristics; identification; educational programs; psychology

An overview of children as human resources and a philosophy of education are presented. The following areas of exceptionality are then considered: educable and trainable mentally retarded, gifted, speech and hearing impaired, visually handicapped, and crippled; and children with brain damage, cerebral palsy, special health problems, and emotional and social problems. The definition, characteristics, identification, and social-emotional adjustment of children in each category are discussed along with educational needs and provisions. A bibliography annotates 10 references; a glossary defines 126 terms; and a directory lists 59 sixteen-millimeter films and 39 film sources. (Author)

## ABSTRACT 50

EC 082 753 ED 025 062
Publ. Date 67 51p.
Helson, Ravenna
**Effects of Sibling Characteristics and Parental Values on Creative Interest and Achievement.**
California University, Berkeley, Institute Of Personality Assessment And Research
Office of Education (DHEW), Washington, D. C., Cooperative Research Program
EDRS mf,hc
OEC-4-6-068012-0959 CRP-S-012-66
BR-6-8012

Descriptors: exceptional child research; gifted; creativity; family (sociological unit); personality; adjustment (to environment); siblings; academic achievement; creative development; family characteristics; family influence; family relationship; personality development; personal values; individual characteristics; rating scales; cognitive tests; interest scales; self concept

In investigating patterns of family relationships conducive to creativity, several inventory-type personality tests and a questionnaire about family relationships and childhood interests were sent to 99 Mills College alumnae 5 years after their graduation and to the siblings of 51 of them. All had been tested, while seniors, for personality and some had been selected as creative by the faculty. The 12 of the 51 who had been picked as creative had nine sisters and eight brothers participating while the comparison 39 had 31 sisters and 28 brothers participating. The creatives had higher verbal aptitude scores and made better grades than the other seniors (p less than .01) and since graduation had shown a higher level of creative activity (p less than .001). The brothers and sisters of the creatives consistently made higher scores than siblings of other Mills women on the indices of creative traits; they had a higher educational level (p less than .01); and the brothers received more honors for intellectual distinction (p less than .01). For the creative Mills sisters, support was found for the conceptualized pattern of having the following: dissatisfaction with their relationships in the family, symbolic facility and an approach to the world focused on the potential or intuitive rather than the practical, and confidence that they could intervene in symbolic affairs and could by their efforts and initiative gain a more satisfying set of relationships. (SN)

## ABSTRACT 51

EC 003 407 ED 025 093
Publ. Date Feb 68 13p.
Williams, Charlotte L.; Tillman, M. H.
**Word Associations for Selected Form Classes of Children Varying in Age and Intelligence.**
Georgia University, Athens, Research And Development Center In Educational Stimulation
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-6-10-061
BR-5-0250
Paper Presented At American Educational Research Association Meeting (Chicago, Illinois, February 7-10, 1968).

Descriptors: exceptional child research; mentally handicapped; gifted; language; cognitive processes; intelligence level; form classes (languages); associative learning; abstract reasoning; cognitive development; task performance; verbal development; adjectives; adverbs; verbs; nominals; syntax; age differences; intelligence differences; average students

The effects of age and intelligence levels upon word associations were studied in 96 intellectually retarded, normal, and superior children with IQ's of 65 to 80, 91 to 110, and 117 to 158 respectively. A word association and a word usage task (reliability coefficients of .91 and .98) called for homogeneous responses to six form classes--count nouns, mass nouns, adjectives, intransitive verbs, transitive verbs, and adverbs. Results generally supported the conclusions that homogeneous responding increased in a linear fashion across age with the more frequently occuring form classes leveling off in some instances, and followed a regular sequence of development regardless of intelligence group. Performance level differed for retardates when they were compared with the superior group and, in some instances, with the normal group while performance level does not differ when normal and superior groups are compared. The rate of homogeneous responding appears to be similar for all intelligence groups on the more commonly used form classes while the groups respond differentially in some instances on the more complex form classes. (Author/JD)

## ABSTRACT 52

EC 003 129 ED 002 824
Publ. Date Jul 61 224p.
Harris, Theodore L.
**Perception of Symbols in Skill Learning by Mentally Retarded, Gifted, and Normal Children.**
Wisconsin University, Madison, School Of Education
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-7135 CRP-263

Descriptors: exceptional child research; mentally handicapped; perception; gifted; handwriting skills; comparative analysis; elementary school students; writing skills; handwriting instruction; language arts; average students; teacher education; educable mentally handicapped; reading; spelling; arithmetic

The process of perceiving language symbols as cues for meaning, models for skill performance, and definitions of value perception was investigated as a continuation of an earlier project (no. 151). The performances of sampling populations of mentally retarded, average, and superior children on selected perceptual tasks were compared. The findings were analyzed in relation to their implications for the teaching-training process. Thirty pupils in grades 4, 5, and 6 at three IQ levels (60 to 69, 96 to 109, and 130 to 139) were tested and studied for perception of fundamental school learning tasks of writing, reading, spelling, and arithmetic The presence and differentiation of normative and aspirational perceptions were demonstrated to be present in the writing behavior of all intelligence groups, and the lack of stability in the writing performance of middle-grade students suggested the importance of this kind of development in the skill training of elementary school children. It was concluded that research and redirection of skill training are needed, and a more adequate handwriting educational program is required. (GC)

## ABSTRACT 53

EC 003 097 ED 002 881
Publ. Date 59 385p.
Blake, Kathryn A.
**Studies of the Effects of Systematic Variations of Certain Conditions Related to Learning. Volume I, Conditions of Reinforcement.**
Syracuse University, New York, Research Institute
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-SAE-7794 CRP-470

Descriptors: exceptional child research; gifted; teaching methods; mentally handicapped; reinforcement; problem solving; learning processes; secondary education; testing; individual tests; average students; children; discrimination learning; academic aspiration; intelligence level; conditioned response; Stanford Binet (Revised)

The effect of systematic variations of selected conditions of reinforcement was evaluated with groups of mentally handicapped, intellectually normal, and intellectually superior children. All subjects had mental ages (Revised Stanford-Binet, Form L) between 9 and 12. Eight tasks were individually administered, tasks assumed to involve conditioned response learning, discrimination learning, rote learning, and problem solving. The proposed conditions of reinforcement were defined as type of reinforcement, frequency of reinforcement, and time of introduction of reinforcement. The dimensions or variations of these conditions overlapped. The analyses of the data involved comparisons both within intelligence groups and between intelligence groups. Relationships pertaining to learning performance and level of aspiration were reported. (LP)

## ABSTRACT 54

EC 003 106 ED 003 844
Publ. Date 65 202p.
Gowan, John Curtis
**Annotated Bibliography on Creativity and Giftedness.**
San Fernando Valley State College, Northridge, California
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-4-10-157 CRP-S-056

Descriptors: exceptional child research; creativity; gifted; periodicals; children; annotated bibliographies; educational researchers; abstracts; Psychological Abstracts

Compiled for educational researchers, this annotated bibliography represents a sampling of published writing on creativity and gifted children since 1960. In a few instances the annotations have been modified or abridged from those found in Psychological Abstracts or other journal abstracts. Some of the annotations have previously appeared in The Gifted Child Quarterly. (LP)

## ABSTRACT 55

EC 003 111 ED 003 802
Publ. Date Jan 61 413p.
Getzels, Jacob W.; Jackson, Philip W.
**Varieties of Giftedness in the Classroom: Studies of Cognitive and Psychosociological Functioning in Adolescents.**
Chicago University, Illinois
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-098

Descriptors: exceptional child research; cognitive processes; personality; gifted; creativity; adolescents; cognitive tests; concept formation; creativity research; psychological testing; intellectual development; moral values; testing; academic achievement; achievement; personal values; values; family environment; attitudes; student attitudes

The cognitive and psychosocial functioning of four categories of gifted children was studied. Two groups of adolescents showing different types of cognitive excellence (intelligence and creativity) and two groups exhibiting different types of psychosocial excellence (morality and psychological adjustment) were investigated using a wide variety of measures, some of them especially developed for this research. Traditional methods of evaluating giftedness have divided children into categories of high or low intelligence, but results of this study indicate there are two other useful categories of cognitive functioning: high IQ without concomitant high creativity and high creativity without concomitant high IQ. Those students representing those categories were found to be equally superior in scholastic achievement to the population from which they were drawn; but the two groups differed sharply in value orientations, their effect upon teachers, their fantasy productions, their career aspirations, and in family environments. (AL)

## ABSTRACT 56

EC 001 545 ED 019 782
Publ. Date 67
Gowan, John Curtis, Comp. And Others
**Creativity--Its Educational Implications.**
EDRS not available
John Wiley And Sons, Inc., 605 Third Avenue, New York, New York 10016 ($7.95).

Descriptors: exceptional child education; creativity; gifted; talented students; curriculum; student characteristics; guidance; identification; teacher education; creativity research; educational needs; performance factors; creative writing; teacher role; parent role; taxonomy; predictive measurement; creative thinking; creative development; creative teaching; creative art; counselor role; teaching methods

Thirty-six articles by different authors present ways in which the results of creativity research may be utilized in the school, the classroom, and the counseling office. After an introduction, five articles treat general considerations: the causes and conditions of creativity, and the education and understanding of creative and gifted children. Four papers on theory and policy investigate creative learning, thinking, development, and potentiality. Characteristics of creative children are discussed in three papers, and the question whether creativity may be increased by practice is raised in five articles dealing with teacher attitudes and teaching. Also included are four articles on a curriculum for creativity and teaching methods, five articles on guidance and measurement of creativity, five on teachers and parents, and five on research and summary. Many of the articles report research findings, and some detail experimental procedures. Reference lists (some annotated) accompany the majority of the papers. (MW)

## ABSTRACT 57

EC 000 945 ED 019 772
Publ. Date 65
Gowan, John Curtis, Ed.; Demos, George D., Ed.
**The Guidance of Exceptional Children, a Book of Readings.**
EDRS not available
David McKay Company, Inc., New York, New York 10013 ($3.95).

Descriptors: exceptional child research; counseling; vocational rehabilitation; guidance; gifted; underachievers; emotionally disturbed; mentally handicapped; blind; deaf; speech handicapped; hard of hearing; physically handicapped; special health problems; self concept; behavior change; cerebral palsy; vocational counseling; identification; sheltered workshops; research projects; academic achievement; parent attitudes; student attitudes; psychoeducational processes; slow learners

A compilation of 62 readings, the book considers the guidance of exceptional

children. An overview section presents papers dealing with self concept, vocational rehabilitation, behavior modification, and the guidance counselor. Included in a section on gifted children are articles about career requirements of gifted children and parents, counseling and guidance, and creativity. A section on underachievers discusses the underachieving gifted child, achievement, and nonachievement and counseling. Emotionally disturbed children are discussed in terms of identification, vocational counseling, psychoeducational processes, and a directed activity program. Articles about the mentally retarded deal with counseling, prevocational evaluation, vocational planning, curriculum, tutorial counseling, and parent group meetings. The section on rehabilitation of mentally retarded youth provides readings about placement, sheltered workshops, determining employability, and philosophy and recommendations of the President's Panel on Mental Retardation. Readings about the blind discuss helping a physically disabled friend, predicting manual work success, counseling, and placement. The section on the deaf and speech handicapped presents readings about the relationship of parental attitudes to speech problems, predicting school achievement in deaf children, counseling (including the hard of hearing), and a talk with parents. The miscellaneous physically handicapped section discusses aspects of cerebral palsy, family adjustment, cardiacs, counseling, education. and vocational rehabilitation. An annotated list of suggested readings follows each section. (MY)

## ABSTRACT 58

EC 001 091 ED N.A.
Publ. Date 63 120p.
DeHaan, Robert F.
**Accelerated Learning Programs.**
Center For Applied Research In Education, Inc., New York, New York, The Library Of Education
EDRS not available

Descriptors: exceptional child education; gifted; creativity; acceleration; enrichment; identification; teacher role; accelerated programs; learning theories; underachievers; administration; curriculum planning; individual characteristics; personality; evaluation techniques; grouping (instructional purposes); teaching methods

The definition, characteristics, benefits, and objectives of accelerated learning programs are presented; the definition and description of candidates considers the origin of a definition and a composite portrait of a gifted student. The role of the teacher and of objective tests in the identification of the gifted includes the tentative nature of the procedures, the identification of nonintellectual talents, and the role of personality factors. Curriculum areas discussed are mathematics, science, foreign languages, and social studies; a problem solving approach to planning is provided. Definitions and pros and cons are given for enrichment, acceleration, and grouping programs; also mentioned are principles of enrichment, community programs, and an example of planning administrative arrangements. A historical sketch and a survey of school programs for the gifted, reports of visits to schools with programs, and an evaluation of accelerated learning programs are included. Also discussed are the following: theories about learning, problems raised by the theories, teaching creative thinking, the role of the teacher, motivation and underachievement, the Talent Preservation Project, and the Superior Talented Student Project. (RP)

## ABSTRACT 59

EC 000 838 ED 026 750
Publ. Date 65 118p.
Gallagher, James J.
**The Influence of a Special School on Cognitive Style and Attitudes of Gifted Students.**
Illinois University, Urbana, Institute For Research On Exceptional Children
Illinois State Office Of The Superintendent Of Public Instruction, Springfield, Department Of Program Planning For The Gifted
EDRS mf,hc

Descriptors: exceptional child research; gifted; environmental influences; cognitive processes; adjustment (to environment); peer groups; student attitudes; laboratory schools; public schools; self concept; intellectual experience; divergent thinking; convergent thinking; secondary schools; social values; personal values

The study identified what influence university laboratory attendance had upon cognitive and attitudinal dimensions of gifted secondary school students (IQ's above 125). Tests from the Guilford battery, a self concept scale, and an adaptation of the Coleman Attitude Scale were administered to both the laboratory and the secondary school populations (249 students). Results indicated few consistent differences on measures of divergent and convergent thinking, and no significant differences on measures of self concept. The following attitudinal differences in lab school groups were observed; the concept of intellectual self was significantly higher at the senior than the junior high level for boys (p less than .01); a substantial reduction in the positive image of the family occured at the senior high level; and being active in school and popular with one's own sex was a better prestige symbol than athletics, heterosexual social activities, or material possessions. Further, in the lab school, a greater number of students expressed negative feelings about school or doubts about their own ability to do well. Sex and age differences are considered; specific results on attitudes and values are discussed. Disadvantages and advantages of both school settings are evaluated. Twenty-eight tables present data; a bibliography cites 23 items. (JD)

## ABSTRACT 60

EC 001 495 ED 026 752
Publ. Date 67 20p.
Brison, David W.; Bereiter, Carl
**Acquistion of Conservation of Substance in Normal, Retarded, and Gifted Children.**
National Institute Of Child Health And Human Development (DHEW), Bethesda, Maryland
EDRS mf,hc
Paper Presented At A Seminar Held At Conference On Preschool Education (The Ontario Institute For Studies In Education, November 15-17, 1966) Published In Recent Research On The Acquisition Of Conservation Of Substance, Educational Research Series No. 2, The Ontario Institute For Studies In Education.

Descriptors: exceptional child research; cognitive processes; learning; intelligence level; conservation (concept); abstraction levels; cognitive development; concept formation; retention; abstraction tests; test results; mentally handicapped; gifted; average students; logical thinking; programed instruction; associative learning; learning characteristics; learning theories

Thirty-seven normal and 33 gifted children from kindergarten classes and 26 retarded children from special classes with mean mental ages of 76 months, 5[illegible] months, and 72 months respectively, were initially tested for their understanding of the terms more, same, and less. All who had failed conservation of substance pretests using juice, sand, clay, and paper were then put through a programed five-stage sequence of conservation training with posttesting after each stage. When a child exhibited conservation with all four materials, he was given two extinction questions which tested the stability of the conservation concept. The main differences between groups were on errors during training, extinction, and explanations. Retardates were significantly more susceptible to extinction of conservation responses (p less than .05) and further study is suggested since this would make a difference in performance if retarded children come out of learning experiences with empirical hypotheses and normal ones with logical certainties. However, no relationship was found between general intelligence level and intuitive concept formation. Eleven tables and a 15-item bibliography are given. (SN)

## ABSTRACT 61

EC 001 741 ED 026 753
Publ. Date 66 169p.
Gallagher, James J.
**Research Summary on Gifted Child Education.**
Illinois State Office Of The Superintendent Of Public Instruction, Springfield, Department Of Program Development For Gifted Children
EDRS mf,hc

Descriptors: exceptional child research; gifted; administration; creativity; student characteristics; academic achieve-

ment; high achievers; state programs; underachievers; teacher qualifications; personnel needs; identification; teaching methods; administrative organization; research reviews (publications); ancillary services; curriculum development; program evaluation; Illinois

Research is summarized and analyzed in this revision of the author's 1960 Analysis of Research on the Education of Gifted Children, which was used as a guide in the construction and implementation ot the Illinois Plan for Program Development for Gifted Children. Information is provided on identification and definition and on characteristics of gifted children. Also discussed are the highly creative child and the underachieving gifted child (attention is given to talent from culturally different groups). Consideration of intervention includes research design and stresses three areas of intervention: the administrative, instructional, and adjunctive. Needed personnel and research development programs in Illinois are treated. Additional research is cited. The bibliography contains over 200 items, dated from approximately 1925 through 1966, and the reference list annotates 32 items. (JP)

## ABSTRACT 62

EC 002 206 ED 026 758
Publ. Date 67 113p.
Gallagher, James J. And Others
**Productive Thinking of Gifted Children in Classroom Interaction. CEC Research Monograph Series B, Number B-5.**
Council For Exceptional Children, Washington, D. C.
Office Of Education (DHEW), Washington, D. C.;
Eizabeth McCormick Foundation, Chicago, Illinois
EjdRS mf
The Council For Exceptional Children, NEA, 1201 16th Street, N. W., Washington, D. C. 20036 ($2.00).

Descriptors: exceptional child research; gifted; attitudes; cognitive processes; interaction; tests; academic achievement; high achievers; junior high school students; teacher attitudes; sex differences; student attitudes; family relationship; questionnaires; questioning techniques; cognitive measurement; convergent thinking; divergent thinking; evaluative thinking; participant characteristics; Guilford; Theoretical Model for the Complete Structure of Intellect

A research project attempted to identify and classify productive thought processes of gifted junior high school students and their teachers. Subjects were 176 gifted high achieving students of both sexes with a verbal IQ range of 127.21 to 136.35, a nonverbal IQ range of 122.88 to 134.59, and a chronological age range of 12.50 to 14.63 years. The students were given tests to determine attitudes and divergent thinking abilities and were evaluated for social qualities and class contributions by their teachers. Parents were asked to complete questionnaires independently to determine family relationships. Three judges, working as a team, tape recorded five consecutive sessions of classes in social studies, science, and English conducted by different teachers in the fall and again the following spring; all comments were classified according to levels of thinking defined in Guilford's structure of the intellect. The types of questions asked by teachers strongly influenced the quality of pupil response. More than 50% of questions asked in a class session were cognitive memory questions. The second most frequent category was convergent thinking, with a much smaller proportion of divergent and evaluative thinking questions. (BB)

## ABSTRACT 63

EC 002 484 ED 026 762
Publ. Date 65 534p.
Barbe, Walter B.
**Psychology and Education of the Gifted: Selected Readings.**
**EDRS not available**
**Appleton-Century-Croft, 440 Park Avenue South, New York, New York 10016 ($4.50).**

Descriptors: exceptional child education; gifted; administration; environmental influences; individual characteristics; achievement; identification; educational strategies; intelligence factors; family (sociological unit); learning characteristics; creativity; attitudes; experimental programs; acceleration; advanced placement; early admission; enrichment programs; grouping (instructional purposes)

An overview of educational and psychological literature concerning the gifted is presented in 55 papers with editorial comments. The historical development of the study of the gifted and cultural attitudes are first considered. Discussions of the effectiveness of various screening methods for identifying the gifted include evaluation of creative, social, and other nonintellectual factors; suggestions are given for providing an optimal environment. Theories are discussed about hereditary and environmental influences on mental ability with ideas for conserving and increasing our supply of superior mental talent. Writings on the characteristics of eminent scientists, unstable geniuses, superior college students, and younger gifted children are included in a consideration of the gifted individual's intellectual, social, and emotional characteristics. Special programs to help develop and encourage giftedness, such as acceleration, enrichment, and homogeneous grouping are described and evaluated; current issues and needed research are considered; and teacher qualities judged effective in aiding creative growth are discussed. (RM)

## ABSTRACT 64

EC 002 513 ED N.A.
Publ. Date 66 61p.
**State and Local Provisions for Talented Students; An Annotated Bibliography.**
Office Of Education, (DHEW), Washington, D. C.
EDRS not available
OEG-35069 BULL-1966-NO-5
Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (FS-5,235:35069, $0.25).

Descriptors: exceptional child education; gifted; administration; curriculum; state programs; annotated bibliographies; identification; guidance; student characteristics; teaching methods; mathematics; language arts; enrichment programs; languages; fine arts; arithmetic; sciences; social studies; program administration

Intended for all persons concerned with differentiated education for talented elementary and secondary school students, the bibliography annotates 275 items (dating from 1956 to 1965 and including audio and video books, tapes, films, and filmstrips) in three groups. The first group includes materials on classroom practices, which are classified by level (elementary, or secondary, or both) and by comprehensive or single subject matter categories (arithmetic or mathematics, fine arts, foreign languages, language arts, science, social studies). The second group contains materials relating to state, county, and local programs (local programs are categorized by level). The third group consists of general materials on the following areas: identification and guidance, characteristics, administrative provisions (categorized by level), and general information. Subject and state indexes are provided. (JD)

## ABSTRACT 65

EC 003 341 ED N.A.
Publ. Date Sep 68 88p.
Pilch, Mary M.
**Special Education for the Gifted through Television; Syllabus 1968-69, A Compendium of Information about a Special Educational Television Program Organized and Developed for Challenging the Productive-Divergent Thinking Potential of Gifted Students in Grades 5-6-7.**
Educational Research And Development Council Of Northeast Minnesota, Duluth
Office Of Education (DHEW), Washington, D. C.
EDRS not available
O E G-3-7-7-03260-4955
P-OE-67-03260-1

Descriptors: exceptional child education; gifted; audiovisual instruction; television; teaching methods; televised instruction; educational television; television curriculum; creative thinking; inservice teacher education; films; productive thinking; population trends; educational needs; health needs; communications; transportation; instructional materials; art appreciation

The use of instructional television and the advantages of a series about man and his future developed for gifted students in grades 5, 6, and 7 are described; the differences between the three related

areas, content, process, and inservice, are mentioned, and the dates, times, titles, and instructors of programs are given. A model for teaching productive-divergent thinking developed by Frank E. Williams lists 23 teaching strategies which are discussed. Synopsis of the 54 half-hour programs comprising the series, (18 programs in each of the three areas), are provided. Content and process areas designed for students are organized according to theme, film data, film concepts, vocabulary, provocative questions, concepts emphasized, and strategies demonstrated while an interpretation and discussion of strategies is given for the inservice shows. Programs cover the following topics: the need for space to control population explosion and to implement new communication systems, and the need for exploration of outer space and transportation problems, health needs, the problem of adequate education for a complex society, and the search for beauty. (RP)

### ABSTRACT 66

EC 000 688 ED N.A.
Publ. Date Feb 66 202p.
Gallagher, James J., Ed.; Hunt, Jacob T., Ed.
**Education of Exceptional Children.**
American Educational Research Association, Washington, D. C., Joint Committee On The Education Of Exceptional Children;
Council For Exceptional Children, Washington, D. C.
EDRS not available
American Educational Research Association, 1201 Sixteenth Street, N. W., Washington, D. C. 20036 ($3.00).
Review Of Educational Research; V36 N1 Feb 1966

Descriptors: exceptional child research; administration; research reviews (publications); gifted; socially maladjusted; teacher education; identification; etiology; research needs; individual characteristics; mentally handicapped; speech handicapped; visually handicapped; learning disabilities; physically handicapped; special health problems; emotionally disturbed; aurally handicapped

Exceptional child research from 1962 to 1965 is reviewed. L.S. Blackman and P. Heintz survey studies in the area of the mentally retarded; J.J. Gallagher and W. Rogge in the area of the gifted; G.J. Canter and J.E. Trost, the speech handicapped; S.C. Ashcroft and R.K. Harley, the visually handicapped; B. Bateman, learning disorders; B. Barlow, the emotionally and socially handicapped; J.T. Hunt, crippling conditions and special health problems; and J. Rosenstein, the deaf and the hard of hearing. B. Blatt evaluates research on preparation of special education personnel; E.P. Willenberg reviews studies on organization, administration, and supervision of special education. Each area treated is subdivided, and each provides a bibliography. (JD)

### ABSTRACT 67

EC 001 652 ED N.A.
Publ. Date Feb 66 11p.
Blatt, Burton
**The Preparation of Special Education Personnel. Chapter VIII, Education of Exceptional Children.**
Boston University, Massachusetts
EDRS not available
Review Of Educational Research; V36 N1 P151-61 Feb 1966

Descriptors: exceptional child research; professional education; teaching methods; teacher education; higher education; deaf; disadvantaged youth; gifted; mentally handicapped; physically handicapped; emotionally disturbed; speech handicapped; socially maladjusted; aurally handicapped; literature reviews; research reviews (publications)

Literature since 1959 which deals with the preparation of special education personnel is reported under categories of methodological, role, and field considerations. Further treated under role considerations are teacher and advanced graduate preparation. Field considerations include the areas of the deaf, the culturally deprived, the gifted, the mentally retarded, the physically handicapped, the socially and emotionally maladjusted, and the speech handicapped. A general assessment of the literature follows. (JD)

### ABSTRACT 68

EC 001 655 ED N.A.
Publ. Date Feb 66 19p.
Gallagher, James J.; Rogge, William
**The Gifted. Chapter II, Education of Exceptional Children.**
Illinois University, Urbana
EDRS not available
Review Of Educational Research; V36 N1 P37-5) Feb 1966

Descriptors: exceptional child research; gifted; identification; individual characteristics; learning; attitudes; sex differences; grouping (instructional purposes); acceleration; honors classes; independent study; counseling; grading; curriculum; underachievers; adjustment (to environment); disadvantaged youth; research reviews (publications); family environment

Research published between February 1963 and June 1965 on the gifted is summarized here. Studies reported are on identification and definition; characteristics, including learning, attitude and personality, and sex differences; and curriculum and program adjustments, including grouping, acceleration, independent study and honors, teacher training, grading and prediction, and counseling and careers. Also reviewed is the literature on perceptions of the gifted by others, underachievement (including family and intervention), and talent and the culturally disadvantaged (including intelligence and social environment). An assessment of the 3 years of research and a 75-item bibliography are provided. (JD)

### ABSTRACT 69

EC 001 425 ED 027 648
Publ. Date Jul 63 29p.
Runyon, Richard P.
**Early Identification of the Gifted through Interage Grouping, Part II. End of Year Report.**
Plainedge Public Schools, New York
New York State Department Of Education, Albany
EDRS mf,hc
EP-A-47-61

Descriptors: exceptional child research; gifted; grouping (instructional purposes); attitudes; achievement; self concept; creativity; student attitudes; child responsibility; tests; friendship; peer relationship; academic achievement; arithmetic; reading; language; elementary school students; grade 2; age differences

Bright second grade students (mean IQ 120) who were randomly placed in either interage or traditional classes were given sentence completion tests and a uses test in an effort to assess the subjects' attitudes toward school, sense of responsibility, self concept, and creative thinking ability. The California Achievement Test was given in October and again in May. Analysis of the test results indicated that the attitudes of interage children toward school were more favorable than the attitudes of children in a straight grade class (p less than .05). Students in interage groups appeared more likely to initiate positive learning experiences in the absence of the teacher and were more likely to solicit student help when needed (p less than .01). There was no significant difference in self concept between interage subjects and the control groups, nor in creative ability as measured by the uses test. The California Achievement Test results for interage students when in first grade showed no significant academic gain over the control students (p less than .01), but for second graders the interage group was significantly better only in arithmetic (p less than .01). Indications were for further research to explore the reason for this discrepancy. (BB)

### ABSTRACT 70

EC 002 987 ED 003 828
Publ. Date 65 59p.
Rothney, John W. M.; Sanborn, Marshall P.
**Verbal Skills of Superior Students.**
Wisconsin University, Madison
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-S-036

Descriptors: exceptional child research; gifted; tests; cognitive processes; cognitive tests; logical thinking; recognition; recall (psychological); thought processes; high school students; grade 10; grade 12; verbal ability; verbal tests; high achievers; learning processes; testing; student improvement

The value of a new procedure for assessing verbal performances of superior high school students was studied. The instrument consisted of two parts. In part A, the student was given an analogy and asked to identify the most logical relationship between the two elements in it.

He was then asked to write a description of the relationship identified. Part B required the student to construct an analogy statement comparable to the one given. Part A was designed to study the student's reasoning behind the anlogy he produced in part B. It was hypothesized that items of this nature might help differentiate students capable of original performance from those who become skilled in recognition and recall tasks. Experimental analogies items were administered to 143 10th grade and 130 12th grade students (males and females). Mean scores of both sophomores and seniors were almost twice as high on analogy recognition as on production. Mean scores for boys and girls at both grade levels showed negligible differences. It was concluded that scores on both parts of the test were associated with grade in school which in turn is associated with age and experience. However, results in production indicated little improvement from the 10th to the 12th grades. (AL)

## ABSTRACT 71

EC 001 017 ED N.A.
Publ. Date Apr 66 6p.
Jones, Reginald L. And Others
**The Social Distance of the Exceptional; A Study at the High School Level.**
EDRS not available
Exceptional Children; V32 N8 P551-6 Apr 1966

Descriptors: exceptional child research; high school students; interpersonal relationship; questionnaires; attitudes; handicapped; student attitudes; sex differences; gifted; deaf; blind; mentally handicapped; delinquency; physically handicapped; special health problems; emotionally disturbed; speech handicapped

To increase the understanding of factors related to acceptance of exceptional persons and to inquire into acceptability in a variety of interpersonal situations, a study was made of 186 subjects in a small midwestern town (109 males and 77 females, grades 9-12, ages 14-19). A questionnaire of 78 paired comparisons of handicapped and nonhandicapped persons was administered to the subjects. The groups comprising the pairs were deaf, blind, hard of hearing, partially seeing, delinquent, chronically ill, emotionally disturbed, speech handicapped, educable mentally retarded, nonexceptional (average), gifted, and crippled. The average and gifted groups were judged most acceptable. The severely retarded were, with one exception, the most unacceptable. Other exceptional groups were at various positions on the continuum depending on the interpersonal relationship specified, with the mildly handicapping conditions tending to be better accepted. The specific interpersonal situations and sex differences of respondents affected acceptability of various exceptional groups. Suggestions for further research are given. Eleven references are included. (GB)

## ABSTRACT 72

EC 001 580 ED 002 823
Publ. Date 58 215p.
Young, Donald D.
**Parental Influence Upon Decisions of Scholastically Talented Youth Concerning Higher Education.**
Wisconsin University, Madison
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-247

Descriptors: exceptional child research; gifted; family (sociological unit); parent attitudes; parental background; parent influence; higher education; high school graduates; college bound students; academic aspiration; motivation; family characteristics

The primary purpose of this investigation was to determine whether there are important differences in selected parental background factors between scholastically talented high school graduates who continue their education in degree-granting institutions and those who do not. There were two related problems: to determine the amount of stability of the post-high school plans of these scholastically talented youth, and to report on the specific activities in which they were engaged in the fall of 1957. Data used for the study were obtained by a statewide survey of 3,500 high school seniors concerning plans beyond high school and family background. A special analysis of 5,500 seniors was used as a later sampling. A survey of their parents determined what they were doing and furnished additional family background information. Analysis of data indicated that the education level attained by parents, occupation of father, economic status, financial help from parents, and parental encouragement were similar in both the students who went on to higher education and those who did not. In addition, a high degree of stability between the various plans of the group expressed in the spring and the realization of the plans was demonstrated. (GC)

## ABSTRACT 73

EC 002 834 ED 002 864
Publ. Date 01 Sep 60 62p.
Lesser, Gerald S.; Davis, Frederick B.
**Identification of Gifted Elementary School Children with Exceptional Scientific Talent.**
City University Of New York, Hunter College
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-392

Descriptors: exceptional child research; tests; identification; gifted; academic ability; academic aptitude; ability identification; elementary school students; talented students; sciences; test construction; predictive validity; grade 3; Hunter Science Aptitude Test

A test of science aptitude was constructed, and preliminary evidence of its validity obtained by individual administration to 58 gifted, 6- and 7-year-old children. Two forms of a 91-item Hunter Science Aptitude Test were constructed. Items included in these tests were designed to measure the ability to recall scientific information, to assign meanings to observations, to apply scientific principles in making predictions, and to use the scientific method. The tests were administered at the beginning of the school year and during the year at completion of seven different science units. A single-weighted, composite science achievement score was thus obtained from each subject. The parallel forms reliability coefficient of the Hunter Science Aptitude Test and the reliability of the weighted composite science achievement score were found to be somewhat lower than expected. However, the predictive validity correlation coefficients were extremely high, because the aptitude tests and the science achievement criterion that were used overlapped the kinds of ability and content measured. Both were modeled upon the content of the third grade science curriculum. Research extensions were recommended in time and scope of the criteria, as well as in additional validation studies. (JH)

## ABSTRACT 74

EC 002 838 ED 002 923
Publ. Date 30 Jun 60 115p.
Cooley, William W.; Bassett, Robert D.
**Evaluation and Followup Study of a Summer Science and Mathematics Program for Talented Secondary School Students.**
Harvard University, Cambridge, Massachusetts, Graduate School Of Education
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-715

Descriptors: exceptional child research; gifted; mathematics; sciences; biology; chemistry; physics; program evaluation; student attitudes; science laboratories; career choice; science careers; secondary school students; summer programs; science courses

The study evaluated a summer program in science and mathematics for 60 promising science students, and determined the effects of such a program on the behavior of students in classes during the ensuing year and on their future career decisions. The first 2 of the 10 weeks of the program, the students were given advanced instruction by visiting scientists and Thayer Academy personnel. The morning consisted of classroom instruction and the afternoon was devoted to laboratory and library research. Each evening a visiting scientist presented a report of research on a different frontier of science. For classes and laboratory, the group was divided into four sections, one each in biology, chemistry, physics, and mathematics. The sections were assigned according to the students' major interests. The last 8 weeks of the program were spent in separate university and industrial laboratories where students worked under the direct guidance

of a research scientist and under periodic supervision of Thayer personnel. The major changes observed during the 10-week period involved the students' image of science and scientists, and their plans for college and careers. Changes were highly interrelated and were expected results of a program in which student exposure to scientists in action was the primary activity. As a career guidance device, the program was highly successful. Future investigations should be concerned with the relative merits of various approaches to the summer program design. (JL)

### ABSTRACT 75

EC 003 120 ED 002 755
Publ. Date 57 53p.
McCarthy, Sister Mary Viterbo
**The Effectiveness of a Modified Counseling Procedure in Promoting Learning among Bright Underachieving Adolescents.**
Regis College, Weston, Massachusetts
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-052

Descriptors: exceptional child research; gifted; counseling; achievement; student attitudes; changing attitudes; underachievers; group counseling; student motivation; grade 9; academic achievement; case studies (education)

The problem was to determine whether significant differences in the scholastic attainment of bright underachieving adolescents could be induced by a short-term small group counseling procedure. Objectives were to help the students diagnose their own failures and plan ways of repairing their own deficiencies, and to bring about a more positive attitude toward study. The experiment involved 12 bright underachieving ninth grade boys. Biographical data, interest scores, and personality indices were gathered on each subject; 12 disguised case studies were prepared, each characterizing a member of the group. In all cases, one of the problems to be considered was a lack of scholastic achievement. The counseling consisted of a series of six sessions during which each group discussed the cases. It was the responsibility of the group to isolate the problems in each case and to suggest possible ways of resolving them. The changes in school achievement and in attitude which occurred were compared with those of a control group to determine the effects of the counseling procedure and to see whether or not the participants were able to transfer their learnings to their own situations. (AH)

### ABSTRACT 76

EC 000 832 ED N.A.
Publ. Date 63 433p.
Crow, Lester D., Ed.; Crow, Alice, Ed.
**Educating the Academically Able; A Book of Readings.**
EDRS not available
David McKay Company, Inc., 750 Third Avenue, New York, New York 10017.

Descriptors: exceptional child education; gifted; identification; adjustment (to environment); counseling; creativity; program administration; program planning; enrichment programs; advanced programs; special programs; elementary education; secondary education; accelerated programs; acceleration; underachievers; creative teaching; experimental teaching; teachers; curriculum; guidance

Eighty-five readings discuss basic principles and programs for the education of the gifted learner. Aspects considered are the general problem of educating the gifted child, identification of the gifted and his characteristics, enrichment, acceleration, adjustment problems, guidance of the academically able, and the gifted underachiever. The following are also treated: the creative individual, the intellectually gifted, providing for the gifted in schools, and programs and administrative practices. (JD)

### ABSTRACT 77

EC 002 618 ED 022 298
Publ. Date 59 187p.
Terman, Lewis M., Ed.
**The Gifted Group at Mid-Life; Thirty-Five Years' Follow-Up of the Superior Child. Genetic of Genius, Volume V.**
EDRS not available
Stanford University Press, Stanford, California 94305 ($5.50).

Descriptors: exceptional child research; gifted; family (sociological unit); behavior; health; personality; adjustment (to environment); intellectual development; occupations; educational background; recreation; social attitudes; political attitudes; demography; participant characteristics; personal interests; followup studies

The 35 years' followup of the Terman investigation on the gifted child is presented. In order to describe the gifted group at mid-life, a general information blank was mailed in 1950 (1,437 subjects) and in 1955 (1,424 subjects). The field study, completed in 1952, included personal interviews, the Concept Mastery Test, supplementary questionnaires of subject and spouse, and testing of offspring. Results for 97.5% of the subjects include the following: intelligence increased significantly from 1939 to 1952 (p less than .001); 85% of the group went to college and nearly 70% graduated; two-thirds of the men and three-fifths of the women did graduate work; on the Minnesota Occupational Scale, all subjects were in the first five of the seven groups and 86% were in the first two (professional and executive) and one-half of the women were housewives but many contributed to community and civic activities. The marriage rate and personal adjustment were average for the population. Other results are given for mortality, health, avocational interests, political and social attitudes, marriage, divorce, income, and offspring. Sixty-one tables are provided. The appendixes include the forms used and a 45-item bibliography. (SN)

### ABSTRACT 78

EC 000 143 ED 016 312
Publ. Date Apr 66 95p.
Karnes, Merle; Burbridge, Hester
**An Evaluation Study with Recommendations.**
Brevard County Exceptional Education Department, Florida
EDRS mf,hc

Descriptors: exceptional child education; educational needs; program planning; mentally handicapped; educable mentally handicapped; trainable mentally handicapped; visually handicapped; aurally handicapped; physically handicapped; deaf; hard of hearing; speech therapy; speech handicapped; gifted; emotionally disturbed; socially maladjusted; vocational education; program administration; school community relationship; county school systems; program evaluation; community resources; learning disabilities

Every public school with special education classes in the Brevard (Florida) county system was visited by specialist consultants during a 2-week period. Parochial and private schools were also contacted. The survey was concerned with provisions and services for the trainable retarded, the educable retarded, the physically handicapped, the deaf and hard of hearing, the socially and emotionally maladjusted, the visually handicapped, the gifted, speech therapy, the child with learning disabilities, prevocational training, and school social work. The community-school relationship was also analyzed. Recommendations accompany the discussion of each program. An appendix of administrative plans is included. (CG)

### ABSTRACT 79

EC 000 831 ED 020 591
Publ. Date 62 64p.
Reynolds, Maynard C., Ed.
**Early School Admission for Mentally Advanced Children; A Review of Research and Practice.**
The Council For Exceptional Children, Washington, D. C.
EDRS mf
The Council For Exceptional Children, 1201 16th Street, N. W., Washington, D. C. 20036 ($2.00).

Descriptors: exceptional child education; gifted; administration; admission (school); early admission; program administration; special programs; program descriptions; program evaluation; case studies (education); school policy; research projects; acceleration; accelerated programs; research reviews (publications); admission criteria; Brookline; Massachusetts; Evanston; Illinois; Minneapolis; Minnesota; Nebraska

Research and school system policies on early admission are reviewed. Maynard C. Reynolds discusses the issue and, with others, surveys research. James R. Hobson relates early admission program for kindergarten in Brookline, Massachusetts; Vera V. Miller describes the program in Evanston, Illinois; Sarah F.

Holbrook explains the program in Minneapolis, Minnesota; and Marshall S. Hiskey reviews 12 years of early admission in Nebraska. A 110-item bibliography is included. (JP)

### ABSTRACT 80

EC 002 163 ED 011 754
Publ. Date Sep 65 37p.
Gunther, Gertrude And Others
**Advanced Placement Program in German.**
New York State Education Department, Albany, Bureau Of Secondary Curriculum Development
EDRS mf,hc
SUNY-H898

Descriptors: exceptional child education; administration; state programs; advanced placement; gifted; program administration; instructional materials; grade 12; booklists; German; program guides; teaching methods; course objectives; curriculum development; state curriculum guides; college language programs; advanced placement examination; program planning; languages; Albany; College Entrance Examination Board

The steps necessary in establishing an advanced placement program in German are discussed in this bulletin for teachers and administrators. The course described is an alternate for the regular 6th-year course offered in the 12th grade. Guidelines are suggested for selecting students, assigning teachers, designing the course, administering the program, and developing methodology for improving students' language skills and teaching literature. Specific techniques are suggested for teaching students to read and interpret literature, with sample lesson excerpts given to illustrate close reading of a prose passage and a poem. The last third of the bulletin is a bibliography of references for the teacher, literary and critical works recommended for the class, record catalogs, and magazines. Lists of European and American book suppliers are included. (AM)

### ABSTRACT 81

EC 002 164 ED 011 755
Publ. Date 65 17p.
Labeille, Danile; Hollister, Kathleen
**Bibliographie Guide for Advanced Placement, French.**
New York State University, New York State Education Department, Albany
EDRS mf,hc

Descriptors: exceptional child education; gifted; advanced placement; instructional materials; phonograph records; films; film strips; books; advanced placement programs; audiovisual aids; bibliographies; French; reading materials; anthologies; periodicals; languages; NDEA Title III; ESEA Title II; New York; Albany

This bibliography of recommended reading for advanced placement classes in French contains 194 items. There is a major section on literary and critical works, and brief sections on periodicals, records, films, and filmstrips. Each item is priced and American suppliers are indicated for books published abroad. The bulletin also contains instructions to New York State teachers for acquiring the listed works under either NDEA Title III or ESEA Title II, and, for convenience in ordering, the list is divided into a basic collection and a second purchase. (AM)

### ABSTRACT 82

EC 002 730 ED N.A.
Publ. Date Oct 66 6p.
Schulman, David
**Openness of Perception as a Condition for Creativity.**
Kansas University, Lawrence, Clinical Psychology Program
EDRS not available
Exceptional Children; V33 N2 P89-94 Oct 1966

Descriptors: exceptional child research; gifted; creativity; perception; tests; perception tests; test results; grade 4; sex differences; student testing; hypothesis testing; visual perception; visual discrimintion; Negroes; creativity research; Drawing Completion Task; Changing Figures Test; Finding of Enclosed Areas Test

In order to determine whether a relationship exists between creativity and a perceptual approach marked by an attitude of opinions toward what is perceived, a creativity test (Drawing Completion Task, DCT) and two perceptual tests (Changing Figures Test, CFT, and Finding of Enclosed Areas Test, FEAT), were given to 89 advanced (mean IQ 110, mean age 10-7) fourth grade Negro children. Score results ranged from 12 to 39 on the CFT, 10 to 28 on the FEAT (both with normal distributions), and from 0 to 45 on the DCT with 51 subjects scoring seven or less. The DCT to FEAT correlation was .48 (p equals .01); data suggested that creativity presupposes openness in perception but not the reverse. The DCT to CFT correlation was .23 (p equals .05) in the predicted direction and might have been higher if the students had been instructed to look for change. Although there was no significant correlation between IQ and any of the tests, a significant difference (p less than .05) between sexes on the DCT was recorded favoring boys and was attributed to possible cultural bias. (JP)

### ABSTRACT 83

EC 002 981 ED 003 438
Publ. Date 64 26p.
Rice, Norman L.
**Preparatory Study for a High School Curriculum in the Fine Arts for Able Students.**
Carnegie Institute Of Technology; Pittsburgh, Pennsylvania
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-H-188

Descriptors: exceptional child education; art; gifted; curriculum; program planning; fine arts; cultural enrichment; curriculum development; instructional materials; high school students; able students; teacher experience; material development

A preliminary study attempted to develop a rationale and series of courses for a 5-year program in the fine arts for able students in secondary schools, find ways to relate the experiences in the arts to other curricular experiences, and develop ways to prepare teachers for the new fine arts curriculum. A series of meetings brought together consultants, college representatives, and public school officials. As a result of the meetings, two working papers on fine arts instruction were developed and are presented in the appendixes of the report. Other meetings of experienced teachers were directed toward feasibility studies, procedural planning, and development of teaching methods. The experienced teachers reported that a valid and meaningful program in the fine arts could be developed, and such a program would have significant value in aiding young people to understand the function of the arts in American society. In the time available, the overall program could not be developed in detail. The developmental program conducted was in three phases: validity of working paper objectives, bases for curriculum development, and steps necessary to develop classroom materials. (JC)

### ABSTRACT 84

EC 003 098 ED 002 815
Publ. Date 59 69p.
Pierce, James V.
**The Educational Motivation Patterns of Superior Students Who Do and Do Not Achieve in High School.**
Chicago University, Illinois
EDRS mf,hc
CRP-208

Descriptors: exceptional child research; gifted; achievement; motivation; academic achievement; talented students; self concept; social adjustment; peer relationship; grade point average; sex differences; grade 10; grade 12; low achievement factors; higher education; high achievers; low achievers; McClellands Thematic Apperception Test; TAT; Chicago Primary Mental Abilities; California Mental Maturity

The motivational patterns and the educational achievement of talented students were identified and analyzed. The objectives were to determine the differences between achievers and nonachievers in the following areas: motivation toward academic achievement; self concept, developmental history and home background, social adjustment, peer relationships, and parents' social status; and continuation of study beyond high school. Also, the patterns of educational motivation of boys and girls were studied for possible differences. It was found that high achieving students tend to be more highly motivated as measured by the interview Measure of Motivation and, in the case of boys, by McClelland's

Test. Value achievement was higher as measured by the Semantic-Differential and, in the case of girls, by Strodtbeck's and Decharms' instruments, and more adjusted as measured by the California Psychological Inventory, Who Are They, and Behavior Description Chart instruments. The girls were more active in extracurricular activities, had more leadership, were more responsible and independent, had somewhat higher social status, came from small families where they were the first-born or only child, had parents who were better educated and held high aspirations for them, saw their fathers as important in their lives, and had mothers who placed a high value on imagination. (JL)

### ABSTRACT 85

EC 500 107 ED N.A.
Publ. Date Mar 69 5p.
Plowman, Paul D.
**Programing for the Gifted Child.**
Except Child; V35 N7 P547-51 Mar 1969

Descriptors: exceptional child eduction; gifted; educational programs; student evaluation; teacher attitudes; program administration; grouping (instructional purposes); classification; instructional technology; school districts

### ABSTRACT 86

EC 500 113 ED N.A.
Publ. Date Mar 69 8p.
Ackerman, Paul R.; Weintraub, Frederick J.
**Summary Analysis of State Laws for Gifted Children.**
Except Child; V35 N7 P569-76 Mar 1969

Descriptors: exceptional child education; gifted; legislation; state laws; identification; educational programs; advisory committees; financial support

### ABSTRACT 87

EC 500 306 ED N.A.
Publ. Date Spr 69 5p.
Isaacs, Ann F.
**Listen Young Gifted Ones....**
Gifted Child Quart; V13 N1 P32-6 Spr 1969

Descriptors: exceptional chilb education; gifted; individual needs; negative attitudes; self esteem; self actualization

### ABSTRACT 88

EC 500 308 ED N.A.
Publ. Date Spr 69 7p.
Sonntag, Joyce
**Sensitivity Training with Gifted Children.**
Gifted Child Quart; V13 N1 P51-7 Spr 1969

Descriptors: exceptional child research; gifted; sensitivity training; interpersonal relationship; self evaluation; group therapy; physical activities; emotional development; T groups; training techniques

### ABSTRACT 89

EC 500 350 ED N.A.
Publ. Date Spr 69 5p.
Williams, Charlotte L.; Blake, Kathryn A.
**Stimulus Meaningfulness and Retarded, Normal, and Superior Subjects' Classification of Verbal Materials.**
J Spec Ed; V3 N1 P95-9 Spr 1969

Descriptors: exceptional child research; mentally handicapped; classification; average students; gifted; association (psychological); verbal stimuli; intelligence differences

# AUTHOR INDEX


Ackerman, Paul R 86.
Adler, Manfred 47.
Banks, George 38.
Barbe, Walter B 23, 63.
Bassett, Robert D 74.
Bereiter, Carl 60.
Bishop, William E 45.
Blake, Kathryn A 33, 53, 89.
Blatt, Burton 67.
Bodahl, Eleanor 1.
Brison, David W 60.
Bryan, J Ned 10.
Burbridge, Hester 78.
Cegelka, Walter J 36.
Chopra, Sukhendra Lal 46.
Cohen, Joseph W, Ed 39.
Cooley, William W 74.
Cornish, Robert L 7.
Crow, Alice, Ed 76.
Crow, Lester D, Ed 76.
Davis, Frederick B 73.
DeHaan, Robert F 28, 58.
Demos, George D, Ed 57.
Dunn, Lloyd M, Ed 44.
Endicott, Frank S 42.
Fliegler, Louis A, Ed 37.
Force, Dewey G, Jr 49.
Framseth, Jane 14.
Gallagher, James J 32, 59, 61, 68.
Gallagher, James J And Other 62.
Gallagher, James J, Ed 40, 66.
Garrison, Karl C 49.
Getzels, Jacob W 55.
Gibbony, Hazel L 19.
Gold, Marvin J 35.
Gowan, John Curtis 54.
Gowan, John Curtis, Comp 56.
Gowan, John Curtis, Ed 57.
Gunther, Gertrude And Other 80.
Harris, Theodore L 52.
Helson, Ravenna 50.
Hennes, James D 5.
Herring, Lewis Homer 26.
Hollister, Kathleen 81.
Horn, R A 23.
Hunt, Jacob T, Ed 66.
Isaacs, Ann F 87.
Jackson, Philip W 55.
Jones, Reginald L And Other 71.
Karnes, Merle B 3, 78.
Kirk, Samuel A 12.
Kirk, Samuel And Other 9.
Koury, Rose 14.
Labeille, Danile 81.
Lesser, Gerald S 73.
Love, Harold D 6.
Martinson, Ruth A 25, 34.
McCarthy, Sister Mary Viterbo 75.
Namy, Elmer 48.
Pierce, James V 84.
Pilch, Mary M 65.
Plowman, Paul D 17, 85.
Reynolds, Maynard C, Ed 79.
Rice, Joseph P 17, 38.
Rice, Norman L 83.
Roberts, Roy J 31.
Rogge, William 68.
Rothney, John W M 70.
Runyon, Richard P 69.
Sanborn, Marshall P 70.
Sawrey, James M 16.
Schulman, David 82.
Seagoe, May V 25.
Smith, Donald C 30.
Sonntag, Joyce 88.
Starkweather, Elizabeth K 8.
Starr, Bernard D, Ed 43.
Steigman, Benjamin M 27.
Telford, Charles W 16.
Terman, Lewis M, Ed 77.
Tillman, M H 51.
Truax, Anne, Comp 24.
Weiner, Bluma B 12.
Weintraub, Frederick J 86.
Wiener, Jean 34.
Williams, Charlotte L 33, 51, 89.
Yamamoto, Kaoru 13.
Young, Donald D 72.


# DOCUMENT CLASSIFICATION INDEX


Bibliographies 24, 54, 64, 81.
Curriculum Guides 18-20, 22, 80.
General Reference 28, 44, 49, 54, 64, 81.
Program Guides 2, 21, 41, 65, 80.
Research Reports 3, 5, 7-8, 12-15, 17, 23, 25-26, 30-35, 38, 45-48, 50-53, 55, 59-62, 66-75, 77, 79, 82, 84, 88-89.

# SUBJECT INDEX


Ability 7.
Ability Grouping 14.
Ability Identification 21, 23, 73.
Able Students 21, 83.
Abstract Reasoning 40, 51.
Abstraction Levels 60.
Abstraction Tests 60.
Abstracts 9, 54.
Academic Ability 7, 48, 73.
Academic Achievement 3, 5, 31, 35, 48, 50, 55, 57, 61-62, 69, 75, 84.
Academic Aptitude 73.
Academic Aspiration 46, 53, 72.
Academic Enrichment 5.
Academically Handicapped 4.
Accelerated Courses 22.
Accelerated Programs 2, 58, 76, 79.
Acceleration 17, 58, 63, 68, 76, 79.
Achievement 7, 31, 35, 48, 55, 63, 69, 75, 84.
Achievement Gains 35.
Achievement Tests 3.
Adjectives 51.
Adjustment (To Environment) 23, 30, 35, 50, 59, 68, 76-77.
Administration 4, 10, 12, 14, 21, 26, 37, 44, 58, 61, 63-64, 66, 79-80.
Administrative Organization 4, 61.
Administrative Policy 10, 21.
Administrator Role 10.
Admission Criteria 2, 41, 79.
Admission (School) 79.
Adolescents 12, 16, 20, 28, 30, 55.
Adults 16.
Advanced Placement 20, 38, 63, 80-81.
Advanced Placement Examination 80.
Advanced Placement Programs 17, 81.
Advanced Programs 76.
Advisory Committees 86.
Age Differences 33, 51, 69.
Albany 80-81.
American Indians 47.
Ancillary Services 61.
Annotated Bibliographies 24, 54, 64.
Anthologies 81.
Aphasia 4.
Arithmetic 18, 37, 52, 64, 69.
Art 25, 27, 31, 41, 83.
Art Appreciation 65.
Association (Psychological) 89.
Associative Learning 51, 60.
Astronomy 5.
Attitudes 5, 55, 62-63, 68-69, 71.
Audiovisual Aids 81.
Audiovisual Instruction 5, 17, 65.
Aurally Handicapped 1, 4, 12, 16, 36, 44, 49, 66-67, 78.
Autoinstructional Methods 35.
Average Students 2, 33, 51-53, 60, 89.
Baltimore 15, 21.
Behavior 8-9, 12, 30, 34, 77.
Behavior Change 57.
Behavior Patterns 1.
Behavior Problems 9.
Behavior Rating Scales 34.
Behavior Standards 29.
Bibliographies 81.
Biological Sciences 32.
Biological Sciences Curriculum Study 32.
Biology 74.
Biology Instruction 32.
Blind 1, 6, 12, 36, 44, 57, 71.
Boards Of Education 10.
Booklists 24, 80.
Books 81.
Brookline 79.
California 15, 17.
California Achievement Tests 3.
California Administrative Code Title Five 4.
California Education Code 4.
California Mental Maturity 84.
California Project Talent 17.
Career Choice 74.
Case Studies (Education) 75, 79.
Caucasian Race 47.
Cerebral Palsy 4, 36, 49, 57.
Champaign 3.
Changing Attitudes 5, 75.
Changing Figures Test 82.
Chemistry 74.
Chicago Primary Mental Abilities 84.
Child Development 9.
Child Rearing 28, 43.
Child Responsibility 69.
Childrens Personality Questionnaire 23.
Classes 32.
Classification 85, 89.
Cognitive Development 51, 60.
Cognitive Measurement 62.
Cognitive Processes 25, 47-48, 51, 55, 59-60, 62, 70.
Cognitive Tests 50, 55, 70.
College Bound Students 72.
College Entrance Examination Board 80.
College Faculty 10.
College Freshmen 31.
College Language Programs 80.
College Preparation 28.
Colleges 39.
Columbus 18-20, 22-23.
Communications 65.
Community Organizations 10.
Community Programs 38, 43.
Community Resources 19, 28, 78.
Compensatory Education 4.
Comprehension 48.
Concept Formation 55, 60.
Concept Teaching 32.
Conditioned Response 53.
Conformity 8, 30.
Conservation (Concept) 60.
Consultant Services 4.
Consultants 17.
Contracts 29.
Convergent Thinking 59, 62.
Counseling 11, 17, 36, 41-42, 57, 68, 75-76.
Counselor Role 56.
Counselors 42.
County School Systems 78.
Course Objectives 80.
Creative Activities 15.
Creative Art 37, 56.
Creative Development 50, 56.
Creative Dramatics 37.
Creative Teaching 15, 56, 76.
Creative Thinking 3, 8, 13, 56, 65.
Creative Writing 3, 13, 25, 37, 56.
Creativity 5, 7-8, 15-16, 23, 25, 27, 40, 43, 50, 54-56, 58, 61, 63, 6', 76, 82.
Creativity Research 3, 13, 25, 55-56, 82.
Critical Thinking 35.
Cultural Background 16.
Cultural Context 16.
Cultural Enrichment 83.
Cultural Environment 16, 46.
Culturally Disadvantaged 4, 16.
Curiosity 8.
Curriculum 4, 7, 10-11, 15, 17, 19-20, 26, 32, 37-38, 40-41, 56, 64, 68, 76, 83.
Curriculum Development 17, 40, 61, 80, 83.
Curriculum Enrichment 3, 18.
Curriculum Evaluation 38.
Curriculum Guides 20, 22.
Curriculum Planning 37, 58.
Deaf 1, 6, 9, 12, 36, 44, 57, 67, 71, 78.
Delinquency 12, 16, 49, 71.
Delinquents 12, 16.
Demography 77.
Demonstration Projects 5, 17.
Disadvantaged Youth 9, 43, 67-68.
Discovery Learning 40.
Discrimination Learning 53.
Divergent Thinking 40, 59, 62.
Drama 41.
Drawing Completion Task 82.
ESEA Title II 81.
Early Admission 40, 63, 79.
Educable Mentally Handicapped 1, 12, 16, 33, 44, 52, 78.
Educational Background 77.
Educational Experience 23.
Educational Facilities 27.
Educational History 39.
Educational Improvement 26.
Educational Needs 6-7, 16, 44, 56, 65, 78.
Educational Philosophy 38.
Educational Practice 10-11, 26.
Educational Principles 10.
Educational Problems 7, 11.
Educational Programs 7, 27, 44, 49, 85-86.
Educational Research 12, 14.
Educational Researchers 54.
Educational Sociology 43.
Educational Strategies 48, 63.
Educational Television 65.
Elementary Education 76.
Elementary Grades 13-15, 19, 23.
Elementary School Students 3, 15, 35, 52, 69, 73.
Elementary Schools 17, 37.
Emotional Adjustment 49.
Emotional Development 14, 88.
Emotionally Disturbed 1, 6, 9, 12, 29, 36, 43-44, 49, 57, 66-67, 71, 78.
English 19, 26, 33, 41, 48.
Enrichment 5, 58.
Enrichment Activities 5, 18-19.
Enrichment Programs 2, 5, 17, 41, 63-64, 76.
Environmental Influences 16, 43, 59, 63.
Ethnic Groups 47.
Ethnology 47.
Etiology 6, 66.
European History 20.
Evaluation Criteria 25.
Evaluation Techniques 58.
Evaluative Thinking 62.
Evanston 79.

Exceptional Child Education 1-2, 4, 6, 10-11, 16-22, 24, 27-29, 36-37, 39-44, 49, 56, 58, 63-65, 76, 78-81, 83, 85-87.
Exceptional Child Research 3, 5, 7-9, 12-15, 23, 25-26, 30-35, 38, 45-48, 50-55, 57, 59-62, 66-75, 77, 82, 84, 88-89.
Experimental Programs 63.
Experimental Teaching 76.
Family Background 23.
Family Characteristics 46, 50, 72.
Family Environment 55, 68.
Family Influence 50.
Family Relationship 50, 62.
Family (Sociological Unit) 28, 36, 46, 50, 63, 72, 77.
Film Strips 81.
Films 65, 81.
Financial Support 86.
Finding Of Enclosed Areas Test 82.
Fine Arts 64, 83.
Flexible Progression 2.
Followup Studies 43, 77.
Form Classes (Languages) 51.
French 81.
Fresno County Special Classes 4.
Friendship 69.
Geography 5.
Georgia 41.
German 80.
Grade Point Average 31, 84.
Grades (Scholastic) 31, 48.
Grading 68.
Group Counseling 17, 75.
Group Dynamics 14.
Group Tests 13.
Group Therapy 88.
Grouping (Instructional Purposes) 7, 11, 14, 58, 63, 68-69, 85.
Grouping Procedures 14.
Guidance 10, 26, 28, 42, 56-57, 64, 76.
Guidance Personnel 10.
Guidance Services 42.
Guidelines 2.
Guilford 62.
Guilford Hoepfner Measures Of Intellectual Ability 25.
Guilford Unusual Use And Consequences Tests 3.
Handwriting Instruction 52.
Handwriting Skills 52.
Hard Of Hearing 6, 12, 44, 57, 78.
Health 77.
Health Impaired 1.
Health Needs 65.
Heterogeneous Grouping 14.
High Achievers 31-32, 46, 61-62, 70, 84.
High School Curriculum 38.
High School Graduates 72.
High School Students 11, 70-71, 83.
Higher Education 7, 39, 67, 72, 84.
History 24.
Home Economics 26.
Homogeneous Grouping 14.
Honors Classes 68.
Honors Curriculum 39.
Humanities 24.
Hunter Science Aptitude Test 73.
Hypothesis Testing 82.
Idaho 1.
Identification 2, 6-7, 10-11, 15, 17, 23, 26, 40, 42-44, 48-49, 56-58, 61, 63-64, 66, 68, 73, 76, 86.
Identification Tests 6.
Illinois 61, 79.
Incidence 1, 44, 47.
Independent Study 5, 68.
India 46.
Individual Characteristics 9, 40, 44, 49-50, 58, 63, 66, 68.
Individual Differences 14, 16.
Individual Needs 87.
Individual Tests 53.
Industrial Arts 26.
Inservice Courses 15.
Inservice Teacher Education 15, 17, 34, 65.
Instructional Materials 20, 24, 44, 65, 80-81, 83.
Instructional Media 19.
Instructional Programs 17.
Instructional Technology 85.
Instructional Television 5.
Intellectual Development 21, 55, 77.
Intellectual Experience 59.
Intelligence 40, 47.
Intelligence Differences 33, 47-48, 51, 89.
Intelligence Factors 30, 63.
Intelligence Level 51, 53, 60.
Intelligence Tests 25, 48.
Interaction 32, 62.
Interaction Process Analysis 32.
Interest Scales 50.
Interinstitutional Cooperation 11.
Intermediate Grades 3, 25, 35.
Interpersonal Relationship 30, 71, 88.
Interviews 38.
Iowa Everypupil Tests 3.
Iowa Tests Of Basic Skills 23.
Jews 47.
Joplin Plan 14.
Junior High School Students 15, 62.
Junior High Schools 17, 26.
LaForce Suczek Interpersonal Check List 30.
Laboratory Schools 59.
Language 33, 51, 69.
Language Ability 33.
Language Arts 7, 37, 52, 64.
Language Handicapped 12.
Language Patterns 33.
Language Skills 33.
Languages 37, 41, 64, 80-81.
Latin 19.
Leadership 31.
Learning 9, 14, 40, 60, 68.
Learning Characteristics 9, 48, 60, 63.
Learning Disabilities 9, 12, 36, 44, 49, 66, 78.
Learning Processes 53, 70.
Learning Theories 58, 60.
Legislation 4, 86.
Liberal Arts 39.
Linguistics 33.
Literature Reviews 12, 14, 67.
Logical Thinking 60, 70.
Low Achievement Factors 84.
Low Achievers 31, 84.
Maryland 15.
Massachusetts 79.
Material Development 17, 83.
Mathematical Enrichment 18.
Mathematics 5, 18, 22, 26, 37, 41, 64, 74.
McClellands Thematic Apperception Test 84.
Measurement 8.
Measurement Techniques 8.
Memorizing 48.
Memory 48.
Mental Health 43.
Mental Health Clinics 43.
Mentally Handicapped 1, 4, 6, 9, 12, 14, 33, 36, 43-44, 49, 51-53, 57, 60, 66-67, 71, 78, 89.
Mexican Americans 47.
Minimally Brain Injured 12, 36, 49.
Minneapolis 79.
Minnesota 79.
Minnesota Tests Of Creative Thinking And Writing 13.
Minority Groups 47.
Moral Values 55.
Morphology (Languages) 33.
Motivation 8, 10-11, 42, 72, 84.
Multiply Handicapped 1.
Music 7, 15, 25, 27, 31, 37, 41.
Music Activities 15.
Music Education 15.
Music Techniques 15.
NDEA Title III 81.
National Organizations 10.
Nebraska 79.
Negative Attitudes 87.
Negro Students 43.
Negroes 47, 82.
Neurologically Handicapped 44.
New York 15, 81.
Nongraded Classes 14.
Nongraded System 14.
Occupational Choice 46.
Occupations 77.
Originality 8, 25.
Orthopedically Handicapped 6, 12, 16, 44, 49.
Parent Attitudes 6, 57, 72.
Parent Counseling 36.
Parent Education 28.
Parent Influence 72.
Parent Role 10, 28, 56.
Parent School Relationship 11, 28.
Parent Student Relationship 28.
Parental Background 72.
Parents 10, 42.
Partially Sighted 6, 12, 44.
Participant Characteristics 62, 77.
Peer Groups 14, 30, 59.
Peer Relationship 69, 84.
Perception 52, 82.
Perception Tests 82.
Perceptually Handicapped 12.
Performance Factors 56.
Periodicals 54, 81.
Personal Adjustment 30, 35.
Personal Interests 77.
Personal Values 50, 55, 59.
Personality 23, 30, 45, 50, 55, 58, 77.
Personality Assessment 30.
Personality Development 50.
Personality Studies 45.
Personnel 10, 21, 29.
Personnel Needs 61.
Phonograph Records 81.
Physical Activities 88.
Physical Characteristics 1, 9.
Physical Development 23.
Physical Education 41.
Physically Handicapped 1, 4, 12, 16, 36, 44, 49, 57, 66-67, 71, 78.
Physics 74.
Pilot Projects 15.
Plane Geometry 22.
Political Attitudes 77.
Population Trends 65.

Prediction 7.
Predictive Measurement 31, 56.
Predictive Validity 31, 73.
Preschool Children 8.
Primary Grades 18.
Problem Solving 53.
Productive Thinking 65.
Professional Education 17, 34, 67.
Program Administration 29, 64, 76, 78-80, 85.
Program Content 32.
Program Descriptions 29, 39, 41, 79.
Program Development 10, 17.
Program Evaluation 4, 11, 22, 39, 61, 74, 78-79.
Program Guides 2, 21, 80.
Program Planning 4, 10, 37, 41, 44, 76, 78, 80, 83.
Programed Instruction 60.
Psychoeducational Processes 57.
Psychological Abstracts 54.
Psychological Characteristics 1.
Psychological Studies 12.
Psychological Testing 43, 55.
Psychology 49.
Public Schools 2, 18, 59.
Question Answer Interviews 38.
Questioning Techniques 34, 62.
Questionnaires 11, 26, 31, 62, 71.
Race 47.
Racial Differences 47.
Racial Factors 47.
Rating Scales 50.
Reading 3, 35, 37, 52, 69.
Reading Materials 81.
Recall (Psychological) 70.
Recognition 70.
Records (Forms) 2.
Recreation 77.
Reference Books 24.
Referral 1.
Reinforcement 53.
Research Needs 8, 66.
Research Problems 8.
Research Projects 7, 40, 57, 79.
Research Reviews (Publications) 7, 9, 12, 40, 47, 61, 66-68, 79.
Residential Schools 29.
Resource Materials 35.
Responsibility 10, 30.
Retention 60.
Rote Learning 48.
San Diego 15.
School Activities 27.
School Attitudes 27.
School Community Relationship 11, 42, 78.
School Curriculum 27.
School Districts 85.
School Environment 27.
School Integration 43.
School Policy 79.
School Responsibility 21.
School Surveys 26.
Science Careers 74.
Science Courses 74.
Science Laboratories 74.
Sciences 24-26, 31-32, 35, 37, 39, 41, 64, 73-74.
Scientific Concepts 32.
Scoring 13.
Secondary Education 53, 76.
Secondary Grades 15, 20.
Secondary School Science 19.
Secondary School Students 27, 38, 41-42, 45, 74.
Secondary School Teachers 45.
Secondary Schools 37, 39, 59.
Self Actualization 87.
Self Concept 7, 30, 50, 57, 59, 69, 84.
Self Directed Classrooms 35.
Self Esteem 87.
Self Evaluation 30, 88.
Sensitivity Training 88.
Sex Differences 62, 68, 71, 82, 84.
Sheltered Workshops 57.
Siblings 50.
Singing 15.
Slow Learners 2, 16, 57.
Social Adjustment 30, 35, 49, 84.
Social Attitudes 77.
Social Characteristics 9.
Social Development 14.
Social Sciences 24, 41.
Social Studies 19-20, 25-26, 35, 37, 64.
Social Values 59.
Socially Deviant Behavior 16.
Socially Maladjusted 1, 6, 44, 49, 66-67, 78.
Socioeconomic Background 23.
Socioeconomic Influences 46.
Sociometric Techniques 14.
Solid Geometry 22.
Special Classes 6, 17.
Special Health Problems 6, 12, 49, 57, 66, 71.
Special Programs 10, 17, 28, 39, 76, 79.
Special Schools 27.
Special Services 4.
Specifications 29.
Speech 31.
Speech Handicapped 4, 6, 16, 36, 44, 49, 57, 66-67, 71, 78.
Speech Therapy 6, 78.
Spelling 3, 52.
Standards 29.
Stanford Binet Intelligence Test 3, 23, 53.
State Curriculum Guides 80.
State Laws 86.
State Legislation 4.
State Programs 21, 41, 61, 64, 80.
Structural Linguistics 33.
Student Ability 25.
Student Attitudes 7, 38, 46, 55, 57, 59, 62, 69, 71, 74-75.
Student Behavior 29.
Student Characteristics 23, 28, 39, 46, 56, 61, 64.
Student Development 35.
Student Evaluation 2, 11, 48, 85.
Student Grouping 14.
Student Improvement 70.
Student Motivation 75.
Student Needs 42.
Student Opinion 38.
Student Placement 2.
Student Reaction 5.
Student Teacher Relationship 14, 45.
Student Testing 82.
Study Skills 35.
Stuttering 36.
Summer Programs 41, 74.
Superior Students 21.
Surveys 11.
Talent Identification 23.
Talented Students 7, 10-11, 56, 73, 84.
Task Performance 8, 51.
Taxonomy 56.
Teacher Attitudes 7, 40, 45, 62.
Teacher Behavior 34, 45.
Teacher Characteristics 34, 45.
Teacher Education 11, 52, 56, 66-67.
Teacher Evaluation 45.
Teacher Experience 45, 83.
Teacher Improvement 34.
Teacher Influence 45.
Teacher Morale 43.
Teacher Qualifications 29, 61.
Teacher Rating 34.
Teacher Responsibility 2, 29.
Teacher Role 10, 56, 58.
Teacher Selection 11, 34, 41.
Teacher Workshops 17.
Teachers 2, 10, 15, 32, 42, 45, 76.
Teaching Guides 19.
Teaching Methods 9, 11, 17, 32, 34-35, 37, 40, 43, 53, 56, 58, 61, 64-65, 67, 80.
Teaching Models 34.
Teaching Programs 32.
Teaching Styles 32, 45.
Televised Instruction 5, 65.
Television 5, 65.
Television Curriculum 65.
Test Construction 73.
Test Interpretation 13.
Test Reliability 13, 34.
Test Results 2, 34-35, 60, 82.
Test Validity 13.
Testing 11, 43, 48, 53, 55, 70.
Tests 2, 11, 13, 62, 69-70, 73, 82.
Texas 26.
Textbooks 16.
Thematic Apperception Test 30, 84.
Theoretical Model For The Complete Structure Of Intellect 62.
Thought Processes 7, 48, 70.
Trainable Mentally Handicapped 1, 16, 44, 78.
Training Techniques 88.
Transportation 65.
Typewriting 3.
Underachievers 7, 36, 40, 46, 57-58, 61, 68, 75-76.
Units Of Study (Subject Fields) 20, 22, 40.
Universities 39.
Urban Education 43.
Values 14, 55.
Verbal Ability 70.
Verbal Development 51.
Verbal Stimuli 89.
Verbal Tests 70.
Video Tape Recordings 5.
Visual Discrimintion 82.
Visual Perception 82.
Visually Handicapped 4, 6, 16, 36, 44, 49, 66, 78.
Vocational Counseling 57.
Vocational Education 2, 78.
Vocational Rehabilitation 57.
Wechsler Intelligence Scale For Children 48.
Work Study Skills 3.
World History 20.
Writing 31.
Writing Skills 52.